



# **Application for Beneficial Use Determination**

**Drinking Water  
Treatment Residuals**

210132  
**Lowell Regional  
Water Utility**  
July 2007

**woodardcurran.com**  
COMMITMENT & INTEGRITY DRIVE RESULTS

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## 1. INTRODUCTION

### 1.1 SITE BACKGROUND

The Lowell Regional Water Utility (LRWU) is located at 815 Pawtucket Boulevard in the western part of Lowell, MA. The LRWU produces over four billion gallons per year of drinking water for consumers in Lowell as well as the surrounding communities of Tyngsboro, Chelmsford, East Chelmsford, Dracut and Tewksbury. Currently, the LRWU is making improvements to the water system including the removal of material from the residuals lagoons. Appendix A contains a Site Locus Map that shows the location of the water treatment facility, raw water pumping station and residuals handling lagoons.

The City of Lowell draws water from the Merrimack River with a raw water pumping station located on the north bank of the river along Pawtucket Boulevard. From this intake station, raw water is pumped approximately one half mile to the Water Treatment Facility, where it is treated and pumped to the distribution system. The treatment process starts at the Raw Water Intake Station with the addition of chlorine dioxide.

The Water Treatment Facility employs conventional water treatment consisting of pretreatment, coagulation, flocculation, sedimentation and filtration. The pretreatment process involves adding Sodium Hypochlorite to remove ammonia. Polyaluminum chloride is used as a coagulant to help remove particles and organic matter. The settled solids from the sedimentation process are directed to the three rectangular lagoons located near the treatment facility. In addition, washwater used to clean granular activated carbon and sand filter beds is also sent to the lagoons. After settling of the solids material has occurred in the lagoons, the liquid portion (supernatant) is allowed to overflow to the Merrimack River in accordance with a NPDES permit. Once a lagoon has received the maximum amount of residual solids, the influent flow is stopped, and the residual solids in the lagoon are allowed to naturally dewater. Dried solids require offsite disposal approximately every four to five years.

The residuals lagoons are completely fenced in and access is permitted through a locked gate. The top of the fence has barbed wire to prevent trespassing.

### 1.2 BENEFICIAL USE MATERIAL

When all three lagoons have reached their maximum solids handling capacity, the total volume of material is estimated to be approximately 23,000 cubic yards. The maximum solids handling capacity is reached approximately every four to five years. Presently, approximately 18,000 cubic yards of residual material from Lagoons No. 2 and No. 3 are available for use. The residual material is proposed for use at Massachusetts' landfills permitted to reuse impacted soil in accordance with the Reuse and Disposal of Contaminated Soil at Massachusetts Landfills MassDEP Policy COMM-97-011. In the past, residual material has been transported out of state for disposal. A Beneficial Use Determination (BUD) permit would provide a cost effective alternative to both the LRWU and the permitted landfill accepting the material.

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## **2. PROPOSED USE OF SECONDARY MATERIAL**

### **2.1 BENEFICIAL MATERIAL PROPOSED USE**

The City is proposing to use the water treatment residuals contained in the LRWU's lagoons at landfills throughout the Commonwealth of Massachusetts. The residuals could be used as daily cover, intermediate cover, and pre-capping material at permitted active and closed landfills. The City hopes that their lagoon residuals material may be used as a beneficial product.

The lagoon residuals are proposed for use in regulated systems such as landfills and are subject to the MassDEP Policy Comm. 97-001 for the reuse of contaminated soil at Massachusetts landfills.

Topsoil is used as daily cover at landfills throughout Massachusetts. Using lagoon residuals in place of topsoil will provide a cost savings to the landfills and eliminate the need for native topsoil.

The use of recycled materials for grading purposes as an alternative to native soils will result in the preservation of natural resources. There is no risk to public health and safety resulting from the use of this water treatment residuals material as landfill shaping material.

### **2.2 HANDLING OF BENEFICIAL MATERIAL**

The City will coordinate with private haulers to transport the residuals material from the lagoons to approved landfills. The transportation of the residuals material will be conducted in accordance with the Material Shipping Record procedures.

The lagoon residuals can be used as is or mixed with compost to achieve the desired vegetative growth sustaining properties such as pH and percent organics. The storage, transport, and use of the lagoon residuals will be in accordance with best management practices to prevent adverse impacts to public health, safety, and the environment.

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### **3. PHYSICAL AND CHEMICAL CHARACTERIZATION**

#### **3.1 PHYSICAL DESCRIPTION**

The lagoon residuals were observed to be very dark brown in color and silty with a solids content of eleven percent.

#### **3.2 CHEMICAL CHARACTERIZATION**

Six grab samples and one composite sample were taken of the lagoon residuals and analyzed for Volatile Organic Compounds (VOC), Semi-Volatile Organic Compounds (SVOC), Extractable Petroleum Hydrocarbons (EPH), Polychlorinated Biphenyls (PCBs), Total RCRA 8 metals, TCLP metals, and SPLP metals. The samples were analyzed by Spectrum Analytical, Inc. of Agawam, Massachusetts. Appendix B contains the certified laboratory reports.

Table 3-1 compares the laboratory results to the lined and unlined landfill standards specified in Table 1 of *Policy #COMM-97-001: Reuse and Disposal of Contaminated Soil at Massachusetts Landfills*. The samples were analyzed for the contaminants listed in Table 1 except for Total Petroleum Hydrocarbons; however the samples were analyzed for Extractable Petroleum Hydrocarbons. Since no Extractable Petroleum Hydrocarbons were detected it is likely that concentrations of Total Petroleum Hydrocarbons would not exceed the unlined landfill standards. None of the contaminants exceeded the levels outlined in Table 1, indicating that the lagoon residuals may be reused as daily cover, intermediate cover, and pre-capping material at permitted Massachusetts landfills.

Table 3-2 provides a chemical characterization of the lagoon residuals. None of the samples had concentrations that exceeded the Table 1 standards. The material meets the BUD S-2/GW-1 guidelines and meets the standards for reuse at both lined and unlined landfills in Massachusetts.

The Toxicity Characteristic Leaching Procedure (TCLP) and Synthetic Precipitation Leaching Procedure (SPLP) data summarized in Table 3-1 and Table 3-2 is consistent with previous samples taken from the lagoon residuals. Appendix C contains the laboratory results for two samples collected in February 2005 and September 2006. The consistency between the lagoon residual samples indicates that the chemical composition is stable and does not change significantly over time.

**Table 3-1: Policy # Comm 97, Table 1 Laboratory Analysis**

Contaminant	Lined Landfill (mg/kg)	Unlined Landfill (mg/kg)	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
Arsenic	40	<1.46	<1.3	<1.28	<1.35	<1.44	<1.27	NA	
Cadmium	80	<0.224	<0.217	<0.214	<0.226	<0.24	<0.212	NA	
Chromium	1,000	<0.488	<0.434	<0.427	<0.451	<0.481	<0.425	NA	
Lead	2,000	1,000	1.37	0.65	1.45	1.26	1.27	1.85	NA
Mercury	10	0.0292	0.0351	<0.0295	<0.0291	0.0323	0.0304	NA	
Total PCBs <sup>b</sup>	< 2	<26.7	<28.1	<27.9	<28.1	<28.5	<27.7	NA	
Total SVOCs <sup>c</sup>	100	<0.979	<0.937	<0.87	<3.84	<3.82	<3.85	NA	
VOCs <sup>d</sup>	10	4	<2.25	<3.58	<2.96	<3.22	<3.56	<3.2	NA
Conductivity <sup>e</sup> (umhos/cm)	8,000 umhos/cm	4,000 umhos/cm	15.4	11.7	17	13.4	18.4	17.4	NA

1. NE indicates that a standard is Not Established
2. NA indicates the sample was Not Analyzed

**Table 3-2: BUD S-2/GW-1 Laboratory Analysis**

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
<b>Indicator Parameters</b>								
% Solids	NE <sup>1</sup>	21.1	22	21	29.5	29.6	24	NA <sup>2</sup>
Specific Conductance (uS/cm)	NE	15.4	11.7	17	13.4	18.4	17.4	NA
<b>Volatile Organic Compounds (µg/kg)</b>								
1,1,2-Trichlorotrifluoroethane (Freon)	NE	<112	<179	<148	<161	<178	<160	NA
Acetone	330	<2,250	<3,580	<2,960	<3,220	<3,560	<3,200	NA
Acrylonitrile	NE	<112	<179	<148	<161	<178	<160	NA
Benzene	150	<112	<179	<148	<161	<178	<160	NA
Bromobenzene	NE	<112	<179	<148	<161	<178	<160	NA
Bromoform	7	<112	<179	<148	<161	<178	<160	NA
Bromomethane	10	<225	<358	<296	<322	<356	<320	NA
2-Butanone (MEK)	NE	<1,120	<1,790	<1,480	<1,610	<1,780	<1,600	NA

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
n-Butylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
sec-Butylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
tert-Butylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
Carbon disulfide	NE	<562	<895	<741	<805	<889	<800	NA
Carbon tetrachloride	3,900	<112	<179	<148	<161	<178	<160	NA
Chlorobenzene	28	<112	<179	<148	<161	<178	<160	NA
Chloroethane	NE	<225	<358	<296	<322	<356	<320	NA
Chloroform	5	<112	<179	<148	<161	<178	<160	NA
Chloromethane	NE	<225	<358	<296	<322	<356	<320	NA
2-Chlorotoluene	NE	<112	<179	<148	<161	<178	<160	NA
4-Chlorotoluene	NE	<112	<179	<148	<161	<178	<160	NA
1,2-Dibromo-3-chloropropane	NE	<225	<358	<296	<322	<356	<320	NA
Dibromochloromethane	5	<112	<179	<148	<161	<178	<160	NA
1,2-Dibromoethane (EDB)	NE	<112	<179	<148	<161	<178	<160	NA
Dibromomethane	NE	<112	<179	<148	<161	<178	<160	NA
1,2-Dichlorobenzene	660	<112	<179	<148	<161	<178	<160	NA
1,3-Dichlorobenzene	660	<112	<179	<148	<161	<178	<160	NA
1,4-Dichlorobenzene	660	<112	<179	<148	<161	<178	<160	NA
Dichlorodifluoromethane (Freon12)	NE	<225	<358	<296	<322	<356	<320	NA
1,1-Dichloroethane	200	<112	<179	<148	<161	<178	<160	NA
1,2-Dichloroethane	5	<112	<179	<148	<161	<178	<160	NA
1,1-Dichloroethene	NE	<112	<179	<148	<161	<178	<160	NA
cis-1,2-Dichloroethene	NE	<112	<179	<148	<161	<178	<160	NA
trans-1,2-Dichloroethene	NE	<112	<179	<148	<161	<178	<160	NA
1,2-Dichloropropane	NE	<112	<179	<148	<161	<178	<160	NA
1,3-Dichloropropane	NE	<112	<179	<148	<161	<178	<160	NA
2,2-Dichloropropane	NE	<112	<179	<148	<161	<178	<160	NA
cis-1,3-Dichloropropene	NE	<112	<179	<148	<161	<178	<160	NA
trans-1,3-Dichloropropene	NE	<112	<179	<148	<161	<178	<160	NA
Ethylbenzene	1,900	<112	<179	<148	<161	<178	<160	NA
Hexachlorobutadiene	45,000	<112	<179	<148	<161	<178	<160	NA
2-Hexanone (MBK)	NE	<1,120	<1,790	<1,480	<1,610	<1,780	<1,600	NA
Isopropylbenzene	NE	<112	<179	<148	<161	<178	<160	NA

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
4-Isopropyltoluene	NE	<112	<179	<148	<161	<178	<160	NA
Methyl ter-butyl ether	140	<112	<179	<148	<161	<178	<160	NA
4-Methyl-2-pentanone (MIBK)	NE	<1,120	<1,790	<1,480	<1,610	<1,780	<1,600	NA
Methylene chloride	NE	<1,120	<1,790	<1,480	<1,610	<1,780	<1,600	NA
Naphthalene	660	<112	<179	<148	<161	<178	<160	NA
n-Propylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
Styrene	15	<112	<179	<148	<161	<178	<160	NA
1,1,1,2-Tetrachloroethane	25	<112	<179	<148	<161	<178	<160	NA
1,1,2,2-Tetrachloroethane	5	<112	<179	<148	<161	<178	<160	NA
Tetrachloroethene	NE	<112	<179	<148	<161	<178	<160	NA
Toluene	1,300	<112	<179	<148	<161	<178	<160	NA
1,2,3-Trichlorobenzene	NE	<112	<179	<148	<161	<178	<160	NA
1,2,4-Trichlorobenzene	660	<112	<179	<148	<161	<178	<160	NA
1,1,1-Trichloroethane	19,000	<112	<179	<148	<161	<178	<160	NA
1,1,2-Trichloroethane	5	<112	<179	<148	<161	<178	<160	NA
Trichloroethene	NE	<112	<179	<148	<161	<178	<160	NA
Trichlorofluoromethane (Freon 11)	NE	<112	<179	<148	<161	<178	<160	NA
1,2,3-Trichloropropane	NE	<112	<179	<148	<161	<178	<160	NA
1,2,4-Trimethylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
1,3,5-Trimethylbenzene	NE	<112	<179	<148	<161	<178	<160	NA
Vinyl chloride	660	<112	<179	<148	<161	<178	<160	NA
m,p-Xylene	420	<255	<358	<296	<322	<356	<320	NA
o-Xylene	420	<112	<179	<148	<161	<178	<160	NA
Tetrahydrofuran	NE	<1120	<1790	<1480	<1610	<1780	<1600	NA
Ethyl ether	NE	<112	<179	<148	<161	<178	<160	NA
Tert-amyl methyl ether	NE	<112	<179	<148	<161	<178	<160	NA
Ethyl tert-butyl ether	NE	<112	<179	<148	<161	<178	<160	NA
Di-isopropyl ether	NE	<112	<179	<148	<161	<178	<160	NA
Tert-Butanol / butyl alcohol	NE	<1120	<1790	<1480	<1610	<1780	<1600	NA
1,4-Dioxane	14	<2,250	<3,580	<2,960	<3,220	<3,560	<3,200	NA
<b>Extractable Petroleum Hydrocarbons (mg/kg)</b>								
Gasoline	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Fuel Oil #2	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
Fuel Oil #4	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Fuel Oil #6	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Motor Oil	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Ligroin	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Aviation Fuel	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Unidentified	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Other Oil	NE	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
Total Petroleum Hydrocarbons	8.4	<39.4	<37.8	<35.1	<38.7	<38.5	<38.8	NA
<b>Polychlorinated Biphenyls (µg/kg)</b>								
PCB 1016	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1221	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1232	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1242	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1248	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1254	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1260	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1262	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
PCB 1268	NE	<26.7	<28.1	<27.9	<28.1	<28.5	<28.5	<27.7
Total: 1,600								
<b>Semivolatile Organic Compounds (µg/kg)</b>								
Acenaphthene	3,900	<979	<937	<870	<961	<956	<962	NA
Acenaphthylene	1,100	<979	<937	<870	<961	<956	<962	NA
Aniline	NE	<979	<937	<870	<961	<956	<962	NA
Anthracene	3,000,000	<979	<937	<870	<961	<956	<962	NA
Atrazine	NE	<979	<937	<870	<961	<956	<962	NA
Azobenzene/Diphenyldiazine	NE	<979	<937	<870	<961	<956	<962	NA
Benzidine	NE	<979	<937	<870	<961	<956	<962	NA
Benzo (a) anthracene	21,000	<979	<937	<870	<961	<956	<962	NA
Benzo (a) pyrene	2,100	<979	<937	<870	<961	<956	<962	NA
Benzo (b) fluoranthene	21,000	<979	<937	<870	<961	<956	<962	NA
Benzo (g,h,i) perylene	3,000,000	<979	<937	<870	<961	<956	<962	NA
Benzo (k) fluoranthene	210,000	<979	<937	<870	<961	<956	<962	NA
Benzoic acid	NE	<979	<937	<870	<961	<956	<962	NA

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
Benzyl alcohol	NE	<979	<937	<870	<961	<956	<962	NA
Bis(2-chloroethoxy)methane	NE	<979	<937	<870	<961	<956	<962	NA
Bis(2-chloroethyl)ether	660	<979	<937	<870	<961	<956	<962	NA
Bis(2-chloroisopropyl)ether	660	<979	<937	<870	<961	<956	<962	NA
Bis(2-ethylhexyl)phthalate	230,000	<979	<937	<870	<961	<956	<962	NA
4-Bromophenyl phenyl ether	NE	<979	<937	<870	<961	<956	<962	NA
Butyl benzyl phthalate	NE	<979	<937	<870	<961	<956	<962	NA
Carbazole	NE	<979	<937	<870	<961	<956	<962	NA
4-Chloro-3-methylphenol	NE	<979	<937	<870	<961	<956	<962	NA
4-Chloroaniline	1,300	<979	<937	<870	<961	<956	<962	NA
2-Chloronaphthalene	NE	<979	<937	<870	<961	<956	<962	NA
2-Chlorophenol	660	<979	<937	<870	<961	<956	<962	NA
4-Chlorophenyl phenyl ether	NE	<979	<937	<870	<961	<956	<962	NA
Chrysene	2,100,000	<979	<937	<870	<961	<956	<962	NA
Dibenzo (a,h) anthracene	2,100	<979	<937	<870	<961	<956	<962	NA
Dibenzofuran	NE	<979	<937	<870	<961	<956	<962	NA
1,2-Dichlorobenzene	660	<979	<937	<870	<961	<956	<962	NA
1,3-Dichlorobenzene	660	<979	<937	<870	<961	<956	<962	NA
1,4-Dichlorobenzene	660	<979	<937	<870	<961	<956	<962	NA
3,3-Dichlorobenzidine	5,400	<979	<937	<870	<961	<956	<962	NA
2,4-Dichlorophenol	NE	<979	<937	<870	<961	<956	<962	NA
Diethyl phthalate	4,900	<979	<937	<870	<961	<956	<962	NA
Dimethyl phthalate	17,000	<979	<937	<870	<961	<956	<962	NA
2,4-Dimethylphenol	660	<979	<937	<870	<961	<956	<962	NA
Di-n-butyl phthalate	NE	<979	<937	<870	<961	<956	<962	NA
4,6-Dinitro-2-methylphenol	NE	<979	<937	<870	<961	<956	<962	NA
2,4-Dinitrophenol	3,300	<979	<937	<870	<961	<956	<962	NA
2,4-Dinitrotoluene	660	<979	<937	<870	<961	<956	<962	NA
2,6-Dinitrotoluene	NE	<979	<937	<870	<961	<956	<962	NA
Di-n-octyl phthalate	NE	<979	<937	<870	<961	<956	<962	NA
Fluoranthene	3,000,000	<979	<937	<870	<961	<956	<962	NA
Fluorene	3,000,000	<979	<937	<870	<961	<956	<962	NA
Hexachlorobenzene	2,400	<979	<937	<870	<961	<956	<962	NA

Sample ID	BUD S-2/GW-1 Levels	SW-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
Hexachlorobutadiene	45,000	<979	<937	<870	<961	<956	<962	NA
Hexachlorocyclopentadiene	NE	<979	<937	<870	<961	<956	<962	NA
Hexachloroethane	660	<979	<937	<870	<961	<956	<962	NA
Indeno (1,2,3-cd) pyrene	21,000	<979	<937	<870	<961	<956	<962	NA
1-Methylnaphthalene	NE	<979	<937	<870	<961	<956	<962	NA
Isophorone	NE	<979	<937	<870	<961	<956	<962	NA
2-Methylnaphthalene	660	<979	<937	<870	<961	<956	<962	NA
2-Methylphenol	NE	<979	<937	<870	<961	<956	<962	NA
3,4- Methylphenol	NE	<979	<937	<870	<961	<956	<962	NA
Naphthalene	660	<979	<937	<870	<961	<956	<962	NA
2-Nitroaniline	NE	<979	<937	<870	<961	<956	<962	NA
3-Nitroaniline	NE	<3,910	<3,750	<3,480	<3,840	<3,820	<3,850	NA
4-Nitroaniline	NE	<979	<937	<870	<961	<956	<962	NA
Nitrobenzene	NE	<979	<937	<870	<961	<956	<962	NA
2-Nitrophenol	NE	<3,910	<3,750	<3,480	<3,840	<3,820	<3,850	NA
4-Nitrophenol	NE	<979	<937	<870	<961	<956	<962	NA
N-Nitrosodimethylamine	180	<979	<937	<870	<961	<956	<962	NA
N-Nitrosodi-n-propylamine	NE	<979	<937	<870	<961	<956	<962	NA
N-Nitrosodiphenylamine	NE	<979	<937	<870	<961	<956	<962	NA
Pentachlorophenol	3,300	<979	<937	<870	<961	<956	<962	NA
Phenanthrene	10,000	<979	<937	<870	<961	<956	<962	NA
Phenol	660	<979	<937	<870	<961	<956	<962	NA
Pyrene	3,000,000	<979	<937	<870	<961	<956	<962	NA
Pyridine	NE	<979	<937	<870	<961	<956	<962	NA
1,2,4-Trichlorobenzene	660	<979	<937	<870	<961	<956	<962	NA
2,4,5-Trichlorophenol	1,600	<979	<937	<870	<961	<956	<962	NA
2,4,6-Trichlorophenol	660	<979	<937	<870	<961	<956	<962	NA
<b>Total Metals (µg/kg)</b>								
Mercury	16	0.0292	0.0351	<0.0295	<0.0291	0.0323	0.0304	NA
Arsenic	11	<1.46	<1.30	<1.28	<1.35	<1.44	<1.27	NA
Cadmium	16	<0.224	<0.217	<0.214	<0.226	<0.240	<0.212	NA
Chromium	570	<0.488	<0.434	<0.427	<0.451	<0.481	<0.425	NA
Lead	110	1.37	0.65	1.45	1.26	1.27	1.85	NA

Sample ID	BUD S-2/GW-1 Levels	S/W-1	N/W-1	S-1	N-1	S/E-1	N/E-1	Composite 01-06
Chromium (mg/L)	570	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA
TCLP Metals by EPA (mg/L)								
Silver	NE	NA	NA	NA	NA	NA	NA	<0.01
Arsenic	NE	NA	NA	NA	NA	NA	NA	<0.015
Barium	NE	NA	NA	NA	NA	NA	NA	0.122
Beryllium	NE	NA	NA	NA	NA	NA	NA	<0.004
Cadmium	NE	NA	NA	NA	NA	NA	NA	<0.0025
Chromium	NE	NA	NA	NA	NA	NA	NA	<0.005
Copper	NE	NA	NA	NA	NA	NA	NA	0.0055
Mercury	NE	NA	NA	NA	NA	NA	NA	<0.0004
Nickel	NE	NA	NA	NA	NA	NA	NA	0.0052
Lead	NE	NA	NA	NA	NA	NA	NA	0.0192
Antimony	NE	NA	NA	NA	NA	NA	NA	0.0066
Selenium	NE	NA	NA	NA	NA	NA	NA	<0.015
Thallium	NE	NA	NA	NA	NA	NA	NA	<0.005
Vanadium	NE	NA	NA	NA	NA	NA	NA	<0.005
Zinc	NE	NA	NA	NA	NA	NA	NA	0.166
SPLP Metals (mg/L)								
Lead	NE	NA	NA	NA	NA	NA	NA	<0.0075
Antimony	NE	NA	NA	NA	NA	NA	NA	0.0161

1. NE indicates that a standard is Not Established
2. NA indicates the sample was Not Analyzed

---

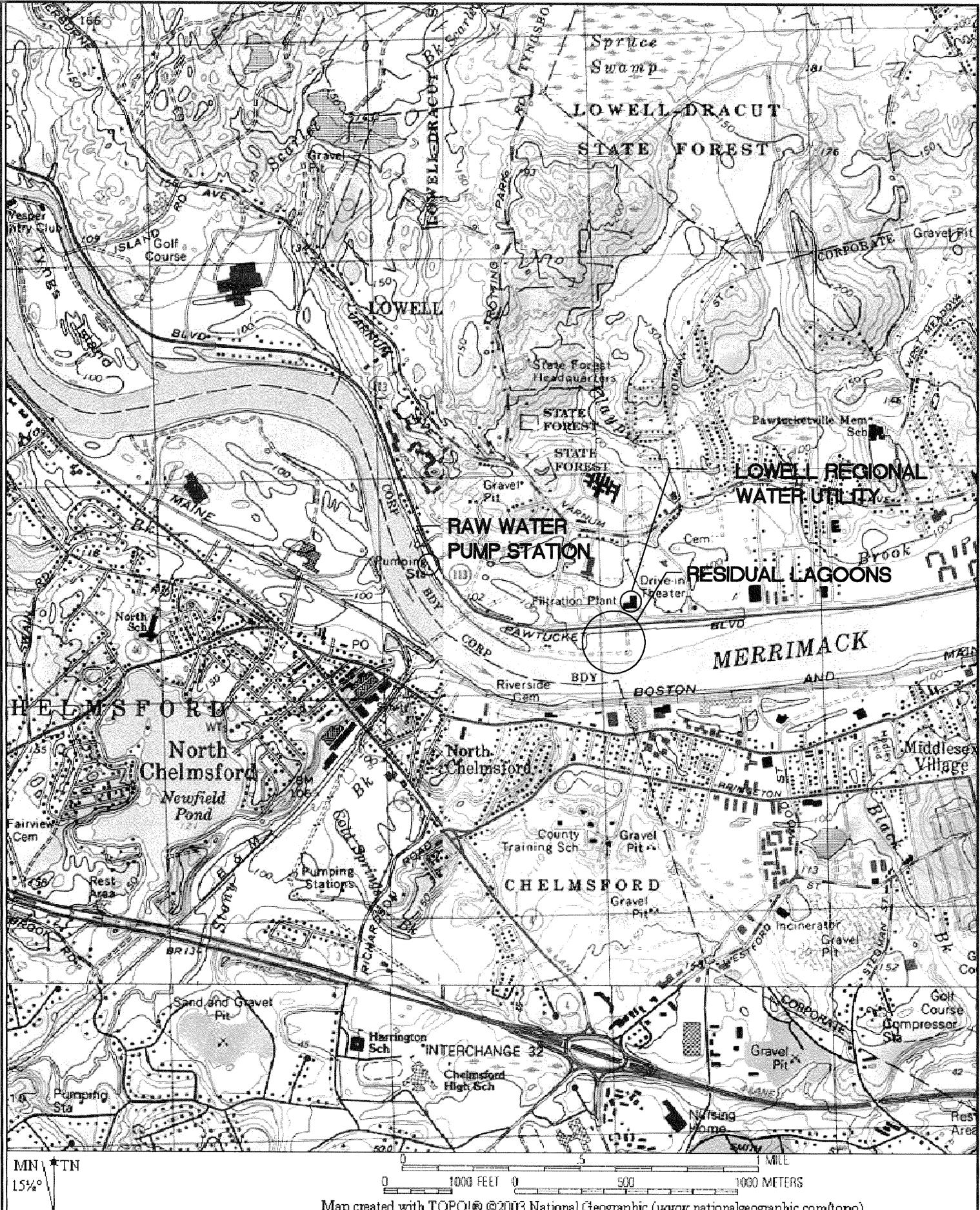
#### **4. EVALUATION AND CONTROL OF POTENTIAL ADVERSE HEALTH, SAFETY OR ENVIRONMENTAL IMPACTS**

Critical Contaminants of Environmental Concern (CCCs), a subset of the universal contaminants of concern include compounds that pose an elevated threat to public health and the environment because they exhibit persistence in the environment; the ability to bioaccumulate; potent toxicity; and/or widespread presence in the environment at levels of concern. The total metals analysis indicates that Mercury and Lead, two CCCs, were detected; however the detection limits were below the BUD S-2/GW-1 and MassDEP Comm 97-001 Table 1 standards. Therefore, the proposed beneficial use of the LWRU treatment plant residuals will not create a significant risk or cause adverse impacts to the public health, safety, and the environment or result in nuisance conditions.

The LWRU is not required to submit a Toxics Use Reduction Plan (TURP) since the facility does not produce, process, or otherwise use a TURA-regulated chemical in excess of the reporting threshold in the current reporting year.

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## **APPENDIX A: SITE LOCATION MAP**



Map created with TOPO!® ©2003 National Geographic ([www.nationalgeographic.com/topo](http://www.nationalgeographic.com/topo))



35 New England Business Center, Suite 180  
Andover, Massachusetts 01810  
866.702.6371 | [www.woodardcurran.com](http://www.woodardcurran.com)

COMMITMENT & INTEGRITY DRIVE RESULTS

### SITE LOCATION MAP

DESIGNED BY: RNF	CHECKED BY: RG
DRAWN BY: RNF	Site Location Map.dwg

LOWELL REGIONAL WASTEWATER UTILITY  
815 PAWTUCKET BOULEVARD

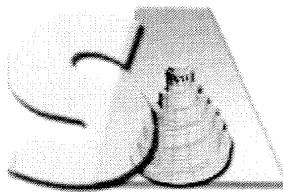
BENEFICIAL USE DETERMINATION

JOB NO: 210132
DATE: July 2007
SCALE: AS NOTED

---

## **APPENDIX B: CERTIFIED SPECTRUM LABORATORY DATA**

Report Date:  
11-Apr-07 14:42



- Final Report  
 Re-Issued Report  
 Revised Report

SPECTRUM ANALYTICAL, INC.  
Featuring  
HANIBAL TECHNOLOGY

**Laboratory Report**

New England Disposal Technologies, Inc  
1 Polito Drive  
Shrewsbury, MA 01545  
Attn: Mike Robertson

Project: Lowell Req. Water Utility - Lowell, MA  
Project (None)

<b>Laboratory ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
SA59659-01	S/W-1	Sludge	22-Mar-07 12:10	23-Mar-07 14:40
SA59659-02	N/W-1	Sludge	22-Mar-07 12:20	23-Mar-07 14:40
SA59659-03	S-1	Sludge	22-Mar-07 12:30	23-Mar-07 14:40
SA59659-04	N-1	Sludge	22-Mar-07 12:40	23-Mar-07 14:40
SA59659-05	S/E-1	Sludge	22-Mar-07 12:50	23-Mar-07 14:40
SA59659-06	N/E-1	Sludge	22-Mar-07 13:00	23-Mar-07 14:40
SA59659-07	Composite 01-06	Sludge	22-Mar-07 00:00	23-Mar-07 14:40

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Please note that this report contains 50 pages of analytical data plus Chain of Custody document(s).

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Massachusetts Certification # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87600/E87936  
Maine # MA138  
New Hampshire # 2538/2972  
New Jersey # MA011/MA012  
New York # 11393/11840  
Rhode Island # 98  
USDA # S-51435  
Vermont # VT-11393

Authorized by:

Hanibal C. Tayeh, Ph.D.  
President/Laboratory Director

Technical Reviewer's Initial:

*Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NH-2972, NY-11840, FL-E87936 and NJ-MA012).*

Sample IdentificationS/W-1  
SA59659-01Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:10Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted		N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon)	BRL		µg/kg	112	50	SW 846 8260B	26-Mar-07	26-Mar-07	7031562	mar
67-64-1	Acetone	BRL		µg/kg	2250	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg	112	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg	112	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg	112	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg	112	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg	112	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg	112	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg	225	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg	1120	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg	112	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg	112	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg	112	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg	562	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg	112	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg	225	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg	112	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg	225	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg	112	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg	112	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg	225	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg	112	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg	112	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg	112	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg	225	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg	112	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg	112	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg	112	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg	112	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg	112	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg	112	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg	112	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg	112	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg	112	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg	112	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg	112	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg	112	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	112	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg	1120	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg	112	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg	112	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg	112	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	1120	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg	1120	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	112	50	"	"	"	"	"

This laboratory report is not valid without an authorized signature on the cover page.

\* Reportable Detection Limit

BRL = Below Reporting Limit

Page 2 of 50

<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>		<u>Collection Date/Time</u>		<u>Received</u>					
S/W-1	SA59659-01	(None)	<th>Sludge</th> <td><th>22-Mar-07 12:10</th><td></td><th>23-Mar-07</th><td></td></td>	Sludge	<th>22-Mar-07 12:10</th> <td></td> <th>23-Mar-07</th> <td></td>	22-Mar-07 12:10		23-Mar-07					
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>		
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds</b>													
Prepared by method SW846 5030 Soil (high level)													
103-65-1	n-Propylbenzene	BRL		µg/kg	112	50	SW 846 8260B	26-Mar-07	26-Mar-07	7031562	mar		
100-42-5	Styrene	BRL		µg/kg	112	50	"	"	"	"	"		
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	112	50	"	"	"	"	"		
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	112	50	"	"	"	"	"		
127-18-4	Tetrachloroethene	BRL		µg/kg	112	50	"	"	"	"	"		
108-88-3	Toluene	BRL		µg/kg	112	50	"	"	"	"	"		
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"		
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	112	50	"	"	"	"	"		
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	112	50	"	"	"	"	"		
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	112	50	"	"	"	"	"		
79-01-6	Trichloroethene	BRL		µg/kg	112	50	"	"	"	"	"		
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	112	50	"	"	"	"	"		
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	112	50	"	"	"	"	"		
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	112	50	"	"	"	"	"		
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	112	50	"	"	"	"	"		
75-01-4	Vinyl chloride	BRL		µg/kg	112	50	"	"	"	"	"		
1330-20-7	m,p-Xylene	BRL		µg/kg	225	50	"	"	"	"	"		
95-47-6	o-Xylene	BRL		µg/kg	112	50	"	"	"	"	"		
109-99-9	Tetrahydrofuran	BRL		µg/kg	1120	50	"	"	"	"	"		
60-29-7	Ethyl ether	BRL		µg/kg	112	50	"	"	"	"	"		
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	112	50	"	"	"	"	"		
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	112	50	"	"	"	"	"		
108-20-3	Di-isopropyl ether	BRL		µg/kg	112	50	"	"	"	"	"		
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1120	50	"	"	"	"	"		
123-91-1	1,4-Dioxane	BRL		µg/kg	2250	50	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	100		70-130 %		"	"	"	"	"	"		
2037-26-5	Toluene-d8	104		70-130 %		"	"	"	"	"	"		
17060-07-0	1,2-Dichloroethane-d4	93		70-130 %		"	"	"	"	"	"		
1868-53-7	Dibromofluoromethane	97		70-130 %		"	"	"	"	"	"		
<b>Extractable Petroleum Hydrocarbons</b>													
<b>TPH 8100 by GC</b>													
Prepared by method SW846 3550B													
8006-61-9	Gasoline	BRL		mg/kg	39.4	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS		
68476-30-2	Fuel Oil #2	BRL		mg/kg	39.4	1	"	"	"	"	"		
68476-31-3	Fuel Oil #4	BRL		mg/kg	39.4	1	"	"	"	"	"		
68553-00-4	Fuel Oil #6	BRL		mg/kg	39.4	1	"	"	"	"	"		
M09800000	Motor Oil	BRL		mg/kg	39.4	1	"	"	"	"	"		
8032-32-4	Ligroin	BRL		mg/kg	39.4	1	"	"	"	"	"		
J00100000	Aviation Fuel	BRL		mg/kg	39.4	1	"	"	"	"	"		
Unidentified		BRL		mg/kg	39.4	1	"	"	"	"	"		
Other Oil		BRL		mg/kg	39.4	1	"	"	"	"	"		
Total Petroleum Hydrocarbons		BRL		mg/kg	39.4	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
3386-33-2	1-Chlorooctadecane	67		40-140 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
12674-11-2	PCB 1016	BRL		µg/kg	26.7	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample IdentificationS/W-1  
SA59659-01Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:10Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Semivolatile Organic Compounds by GC</b>											
<b>Polychlorinated Biphenyls by SW846 8082</b>											
Prepared by method SW846 3545A											
11104-28-2	PCB 1221	BRL		µg/kg	26.7	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM
11141-16-5	PCB 1232	BRL		µg/kg	26.7	1	"	"	"	"	"
53469-21-9	PCB 1242	BRL		µg/kg	26.7	1	"	"	"	"	"
12672-29-6	PCB 1248	BRL		µg/kg	26.7	1	"	"	"	"	"
11097-69-1	PCB 1254	BRL		µg/kg	26.7	1	"	"	"	"	"
11096-82-5	PCB 1260	BRL		µg/kg	26.7	1	"	"	"	"	"
37324-23-5	PCB 1262	BRL		µg/kg	26.7	1	"	"	"	"	"
11100-14-4	PCB 1268	BRL		µg/kg	26.7	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	45			30-150 %		"	"	"	"	"
2051-24-3	Decachlorobiphenyl (Sr)	65			30-150 %		"	"	"	"	"
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
83-32-9	Acenaphthene	BRL		µg/kg	979	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
208-96-8	Acenaphthylene	BRL		µg/kg	979	1	"	"	"	"	"
62-53-3	Aniline	BRL		µg/kg	979	1	"	"	"	"	"
120-12-7	Anthracene	BRL		µg/kg	979	1	"	"	"	"	"
1912-24-9	Atrazine	BRL		µg/kg	979	1	"	"	"	"	"
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	979	1	"	"	"	"	"
92-87-5	Benzidine	BRL		µg/kg	979	1	"	"	"	"	"
56-55-3	Benzo (a) anthracene	BRL		µg/kg	979	1	"	"	"	"	"
50-32-8	Benzo (a) pyrene	BRL		µg/kg	979	1	"	"	"	"	"
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	979	1	"	"	"	"	"
191-24-2	Benzo (g,h,i) perlylene	BRL		µg/kg	979	1	"	"	"	"	"
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	979	1	"	"	"	"	"
65-85-0	Benzoic acid	BRL		µg/kg	979	1	"	"	"	"	"
100-51-6	Benzyl alcohol	BRL		µg/kg	979	1	"	"	"	"	"
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	979	1	"	"	"	"	"
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	979	1	"	"	"	"	"
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	979	1	"	"	"	"	"
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	979	1	"	"	"	"	"
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	979	1	"	"	"	"	"
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	979	1	"	"	"	"	"
86-74-8	Carbazole	BRL		µg/kg	979	1	"	"	"	"	"
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	979	1	"	"	"	"	"
106-47-8	4-Chloroaniline	BRL		µg/kg	979	1	"	"	"	"	"
91-58-7	2-Chloronaphthalene	BRL		µg/kg	979	1	"	"	"	"	"
95-57-8	2-Chlorophenol	BRL		µg/kg	979	1	"	"	"	"	"
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	979	1	"	"	"	"	"
218-01-9	Chrysene	BRL		µg/kg	979	1	"	"	"	"	"
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	979	1	"	"	"	"	"
132-64-9	Dibenzofuran	BRL		µg/kg	979	1	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	979	1	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	979	1	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	979	1	"	"	"	"	"
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	979	1	"	"	"	"	"
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	979	1	"	"	"	"	"
84-66-2	Diethyl phthalate	BRL		µg/kg	979	1	"	"	"	"	"
131-11-3	Dimethyl phthalate	BRL		µg/kg	979	1	"	"	"	"	"

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\* Reportable Detection Limit

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Sample Identification

S/W-1

SA59659-01

Client Project #

(None)

Matrix

Sludge

Collection Date/Time

22-Mar-07 12:10

Received

23-Mar-07

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	979	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	979	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	979	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	979	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	979	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	979	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	979	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	979	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	979	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	979	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	979	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	979	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	979	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	979	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	979	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	979	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	979	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	979	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg	979	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	979	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	979	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	979	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3910	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	979	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	979	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3910	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	979	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	979	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	979	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	979	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	979	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	979	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	979	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	979	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	979	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	979	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	979	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	60		30-130 %			"	"	"	"	"
367-12-4	2-Fluorophenol	61		15-110 %			"	"	"	"	"
4165-60-0	Nitrobenzene-d5	58		30-130 %			"	"	"	"	"
4165-62-2	Phenol-d5	58		15-110 %			"	"	"	"	"
1718-51-0	Terphenyl-d14	68		30-130 %			"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	62		15-110 %			"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	BRL		mg/kg	0.0292	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.46	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
S/W-1	SA59659-01	(None)		Sludge	22-Mar-07 12:10		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.244	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.488	1	"	"	"	"	"
7439-92-1	Lead	1.37		mg/kg	0.732	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
	TCLP Extraction	Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
	% Solids	21.1		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
	Specific Conductance (EC)	15.4		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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Sample Identification

N/W-1

SA59659-02

Client Project #

(None)

Matrix

Sludge

Collection Date/Time

22-Mar-07 12:20

Received

23-Mar-07

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted		N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (FreonBRL)		BRL	µg/kg	179	50	SW 846 8260B	26-Mar-07	26-Mar-07	7031562	mar
67-64-1	Acetone		BRL	µg/kg	3580	50	"	"	"	"	"
107-13-1	Acrylonitrile		BRL	µg/kg	179	50	"	"	"	"	"
71-43-2	Benzene		BRL	µg/kg	179	50	"	"	"	"	"
108-86-1	Bromobenzene		BRL	µg/kg	179	50	"	"	"	"	"
74-97-5	Bromochloromethane		BRL	µg/kg	179	50	"	"	"	"	"
75-27-4	Bromodichloromethane		BRL	µg/kg	179	50	"	"	"	"	"
75-25-2	Bromoform		BRL	µg/kg	179	50	"	"	"	"	"
74-83-9	Bromomethane		BRL	µg/kg	358	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)		BRL	µg/kg	1790	50	"	"	"	"	"
104-51-8	n-Butylbenzene		BRL	µg/kg	179	50	"	"	"	"	"
135-98-8	sec-Butylbenzene		BRL	µg/kg	179	50	"	"	"	"	"
98-06-6	tert-Butylbenzene		BRL	µg/kg	179	50	"	"	"	"	"
75-15-0	Carbon disulfide		BRL	µg/kg	895	50	"	"	"	"	"
56-23-5	Carbon tetrachloride		BRL	µg/kg	179	50	"	"	"	"	"
108-90-7	Chlorobenzene		BRL	µg/kg	179	50	"	"	"	"	"
75-00-3	Chloroethane		BRL	µg/kg	358	50	"	"	"	"	"
67-66-3	Chloroform		BRL	µg/kg	179	50	"	"	"	"	"
74-87-3	Chloromethane		BRL	µg/kg	358	50	"	"	"	"	"
95-49-8	2-Chlorotoluene		BRL	µg/kg	179	50	"	"	"	"	"
106-43-4	4-Chlorotoluene		BRL	µg/kg	179	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane		BRL	µg/kg	358	50	"	"	"	"	"
124-48-1	Dibromochloromethane		BRL	µg/kg	179	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)		BRL	µg/kg	179	50	"	"	"	"	"
74-95-3	Dibromomethane		BRL	µg/kg	179	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene		BRL	µg/kg	179	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene		BRL	µg/kg	179	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene		BRL	µg/kg	179	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)		BRL	µg/kg	358	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane		BRL	µg/kg	179	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane		BRL	µg/kg	179	50	"	"	"	"	"
75-35-4	1,1-Dichloroethylene		BRL	µg/kg	179	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene		BRL	µg/kg	179	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene		BRL	µg/kg	179	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane		BRL	µg/kg	179	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane		BRL	µg/kg	179	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane		BRL	µg/kg	179	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene		BRL	µg/kg	179	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene		BRL	µg/kg	179	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene		BRL	µg/kg	179	50	"	"	"	"	"
100-41-4	Ethylbenzene		BRL	µg/kg	179	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene		BRL	µg/kg	179	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)		BRL	µg/kg	1790	50	"	"	"	"	"
98-82-8	Isopropylbenzene		BRL	µg/kg	179	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene		BRL	µg/kg	179	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether		BRL	µg/kg	179	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)		BRL	µg/kg	1790	50	"	"	"	"	"
75-09-2	Methylene chloride		BRL	µg/kg	1790	50	"	"	"	"	"
91-20-3	Naphthalene		BRL	µg/kg	179	50	"	"	"	"	"

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received						
N/W-1	SA59659-02	(None)		Sludge	22-Mar-07 12:20		23-Mar-07						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds</b>													
Prepared by method SW846 5030 Soil (high level)													
103-65-1	n-Propylbenzene	BRL		µg/kg	179	50	SW 846 8260B	26-Mar-07	26-Mar-07	7031562	mar		
100-42-5	Styrene	BRL		µg/kg	179	50	"	"	"	"	"		
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	179	50	"	"	"	"	"		
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	179	50	"	"	"	"	"		
127-18-4	Tetrachloroethene	BRL		µg/kg	179	50	"	"	"	"	"		
108-88-3	Toluene	BRL		µg/kg	179	50	"	"	"	"	"		
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	179	50	"	"	"	"	"		
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	179	50	"	"	"	"	"		
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	179	50	"	"	"	"	"		
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	179	50	"	"	"	"	"		
79-01-6	Trichloroethene	BRL		µg/kg	179	50	"	"	"	"	"		
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	179	50	"	"	"	"	"		
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	179	50	"	"	"	"	"		
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	179	50	"	"	"	"	"		
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	179	50	"	"	"	"	"		
75-01-4	Vinyl chloride	BRL		µg/kg	179	50	"	"	"	"	"		
1330-20-7	m,p-Xylene	BRL		µg/kg	358	50	"	"	"	"	"		
95-47-6	o-Xylene	BRL		µg/kg	179	50	"	"	"	"	"		
109-99-9	Tetrahydrofuran	BRL		µg/kg	1790	50	"	"	"	"	"		
60-29-7	Ethyl ether	BRL		µg/kg	179	50	"	"	"	"	"		
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	179	50	"	"	"	"	"		
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	179	50	"	"	"	"	"		
108-20-3	Di-isopropyl ether	BRL		µg/kg	179	50	"	"	"	"	"		
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1790	50	"	"	"	"	"		
123-91-1	1,4-Dioxane	BRL		µg/kg	3580	50	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	101		70-130 %		"	"	"	"	"	"		
2037-26-5	Toluene-d8	102		70-130 %		"	"	"	"	"	"		
17060-07-0	1,2-Dichloroethane-d4	91		70-130 %		"	"	"	"	"	"		
1868-53-7	Dibromofluoromethane	95		70-130 %		"	"	"	"	"	"		
<b>Extractable Petroleum Hydrocarbons</b>													
<b>TPH 8100 by GC</b>													
Prepared by method SW846 3550B													
8006-61-9	Gasoline	BRL		mg/kg	37.8	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS		
68476-30-2	Fuel Oil #2	BRL		mg/kg	37.8	1	"	"	"	"	"		
68476-31-3	Fuel Oil #4	BRL		mg/kg	37.8	1	"	"	"	"	"		
68553-00-4	Fuel Oil #6	BRL		mg/kg	37.8	1	"	"	"	"	"		
M09800000	Motor Oil	BRL		mg/kg	37.8	1	"	"	"	"	"		
8032-32-4	Ligroin	BRL		mg/kg	37.8	1	"	"	"	"	"		
J00100000	Aviation Fuel	BRL		mg/kg	37.8	1	"	"	"	"	"		
Unidentified		BRL		mg/kg	37.8	1	"	"	"	"	"		
Other Oil		BRL		mg/kg	37.8	1	"	"	"	"	"		
Total Petroleum Hydrocarbons		BRL		mg/kg	37.8	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
3386-33-2	1-Chlorooctadecane	69		40-140 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GC</b>													
<u>Polychlorinated Biphenyls by SW846 8082</u>													
Prepared by method SW846 3545A													
12674-11-2	PCB 1016	BRL		µg/kg	28.1	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		

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Sample IdentificationN/W-1  
SA59659-02Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:20Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
11104-28-2	PCB 1221	BRL		µg/kg	28.1	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		
11141-16-5	PCB 1232	BRL		µg/kg	28.1	1	"	"	"	"	"		
53469-21-9	PCB 1242	BRL		µg/kg	28.1	1	"	"	"	"	"		
12672-29-6	PCB 1248	BRL		µg/kg	28.1	1	"	"	"	"	"		
11097-69-1	PCB 1254	BRL		µg/kg	28.1	1	"	"	"	"	"		
11096-82-5	PCB 1260	BRL		µg/kg	28.1	1	"	"	"	"	"		
37324-23-5	PCB 1262	BRL		µg/kg	28.1	1	"	"	"	"	"		
11100-14-4	PCB 1268	BRL		µg/kg	28.1	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	65		30-150 %		"	"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr)	80		30-150 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds by SW846 8270C</b>													
Prepared by method SW846 3550B													
83-32-9	Acenaphthene	BRL		µg/kg	937	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B		
208-96-8	Acenaphthylene	BRL		µg/kg	937	1	"	"	"	"	"		
62-53-3	Aniline	BRL		µg/kg	937	1	"	"	"	"	"		
120-12-7	Anthracene	BRL		µg/kg	937	1	"	"	"	"	"		
1912-24-9	Atrazine	BRL		µg/kg	937	1	"	"	"	"	"		
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	937	1	"	"	"	"	"		
92-87-5	Benzidine	BRL		µg/kg	937	1	"	"	"	"	"		
56-55-3	Benzo (a) anthracene	BRL		µg/kg	937	1	"	"	"	"	"		
50-32-8	Benzo (a) pyrene	BRL		µg/kg	937	1	"	"	"	"	"		
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	937	1	"	"	"	"	"		
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg	937	1	"	"	"	"	"		
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	937	1	"	"	"	"	"		
65-85-0	Benzoic acid	BRL		µg/kg	937	1	"	"	"	"	"		
100-51-6	Benzyl alcohol	BRL		µg/kg	937	1	"	"	"	"	"		
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	937	1	"	"	"	"	"		
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	937	1	"	"	"	"	"		
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	937	1	"	"	"	"	"		
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	937	1	"	"	"	"	"		
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	937	1	"	"	"	"	"		
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	937	1	"	"	"	"	"		
86-74-8	Carbazole	BRL		µg/kg	937	1	"	"	"	"	"		
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	937	1	"	"	"	"	"		
106-47-8	4-Chloroaniline	BRL		µg/kg	937	1	"	"	"	"	"		
91-58-7	2-Chloronaphthalene	BRL		µg/kg	937	1	"	"	"	"	"		
95-57-8	2-Chlorophenol	BRL		µg/kg	937	1	"	"	"	"	"		
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	937	1	"	"	"	"	"		
218-01-9	Chrysene	BRL		µg/kg	937	1	"	"	"	"	"		
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	937	1	"	"	"	"	"		
132-64-9	Dibenzofuran	BRL		µg/kg	937	1	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	937	1	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	937	1	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	937	1	"	"	"	"	"		
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	937	1	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	937	1	"	"	"	"	"		
84-66-2	Diethyl phthalate	BRL		µg/kg	937	1	"	"	"	"	"		
131-11-3	Dimethyl phthalate	BRL		µg/kg	937	1	"	"	"	"	"		

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
N/W-1	SA59659-02	(None)		Sludge	22-Mar-07 12:20		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	937	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	937	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	937	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	937	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	937	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	937	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	937	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	937	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	937	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	937	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	937	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	937	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	937	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	937	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	937	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	937	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	937	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	937	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg	937	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	937	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	937	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	937	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3750	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	937	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	937	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3750	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	937	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	937	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	937	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	937	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	937	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	937	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	937	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	937	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	937	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	937	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	937	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	60		30-130 %		"	"	"	"	"	"
367-12-4	2-Fluorophenol	49		15-110 %		"	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	56		30-130 %		"	"	"	"	"	"
4165-62-2	Phenol-d5	48		15-110 %		"	"	"	"	"	"
1718-51-0	Terphenyl-d4	69		30-130 %		"	"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	53		15-110 %		"	"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	0.0351		mg/kg	0.0298	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.30	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
N/W-1	SA59659-02	(None)		Sludge	22-Mar-07 12:20		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.217	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.434	1	"	"	"	"	"
7439-92-1	Lead	0.650		mg/kg	0.650	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
	TCLP Extraction	Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
	% Solids	22.0		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
	Specific Conductance (EC)	11.7		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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\* Reportable Detection Limit      BRL = Below Reporting Limit

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received				
S-1	SA59659-03	(None)		Sludge	22-Mar-07 12:30		23-Mar-07				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted		N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon)	BRL		µg/kg	148	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
67-64-1	Acetone	BRL		µg/kg	2960	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg	148	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg	148	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg	148	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg	148	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg	148	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg	148	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg	296	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg	1480	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg	741	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg	148	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg	296	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg	148	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg	296	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg	148	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg	148	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg	296	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg	148	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg	148	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg	148	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg	296	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg	148	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg	148	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg	148	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg	148	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg	148	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg	148	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg	148	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg	148	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg	148	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg	148	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg	148	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	148	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg	1480	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg	148	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg	148	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	1480	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg	1480	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	148	50	"	"	"	"	"

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\* Reportable Detection Limit

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Sample IdentificationS-1  
SA59659-03Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:30Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
<u>Volatile Organic Compounds</u>											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg	148	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
100-42-5	Styrene	BRL		µg/kg	148	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	148	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	148	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg	148	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg	148	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	148	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	148	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	148	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg	148	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	148	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	148	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	148	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg	148	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg	296	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg	148	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg	1480	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg	148	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	148	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	148	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg	148	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1480	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg	2960	50	"	"	"	"	"
<i>Surrogate recoveries:</i>											
460-00-4	4-Bromofluorobenzene	100			70-130 %		"	"	"	"	"
2037-26-5	Toluene-d8	103			70-130 %		"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	93			70-130 %		"	"	"	"	"
1868-53-7	Dibromofluoromethane	95			70-130 %		"	"	"	"	"
<b>Extractable Petroleum Hydrocarbons</b>											
<u>TPH 8100 by GC</u>											
Prepared by method SW846 3550B											
8006-61-9	Gasoline	BRL		mg/kg	35.1	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS
68476-30-2	Fuel Oil #2	BRL		mg/kg	35.1	1	"	"	"	"	"
68476-31-3	Fuel Oil #4	BRL		mg/kg	35.1	1	"	"	"	"	"
68553-00-4	Fuel Oil #6	BRL		mg/kg	35.1	1	"	"	"	"	"
M09800000	Motor Oil	BRL		mg/kg	35.1	1	"	"	"	"	"
8032-32-4	Ligroin	BRL		mg/kg	35.1	1	"	"	"	"	"
J00100000	Aviation Fuel	BRL		mg/kg	35.1	1	"	"	"	"	"
Unidentified											
Other Oil											
Total Petroleum Hydrocarbons											
<i>Surrogate recoveries:</i>											
3386-33-2	1-Chlorooctadecane	65			40-140 %		"	"	"	"	"
<b>Semivolatile Organic Compounds by GC</b>											
<u>Polychlorinated Biphenyls by SW846 8082</u>											
Prepared by method SW846 3545A											
12674-11-2	PCB 1016	BRL		µg/kg	27.9	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received						
S-1	SA59659-03	(None)		Sludge	22-Mar-07 12:30		23-Mar-07						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
11104-28-2	PCB 1221	BRL		µg/kg	27.9	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		
11141-16-5	PCB 1232	BRL		µg/kg	27.9	1	"	"	"	"	"		
53469-21-9	PCB 1242	BRL		µg/kg	27.9	1	"	"	"	"	"		
12672-29-6	PCB 1248	BRL		µg/kg	27.9	1	"	"	"	"	"		
11097-69-1	PCB 1254	BRL		µg/kg	27.9	1	"	"	"	"	"		
11096-82-5	PCB 1260	BRL		µg/kg	27.9	1	"	"	"	"	"		
37324-23-5	PCB 1262	BRL		µg/kg	27.9	1	"	"	"	"	"		
11100-14-4	PCB 1268	BRL		µg/kg	27.9	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	55		30-150 %		"	"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr)	70		30-150 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds by SW846 8270C</b>													
Prepared by method SW846 3550B													
83-32-9	Acenaphthene	BRL		µg/kg	870	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B		
208-96-8	Acenaphthylene	BRL		µg/kg	870	1	"	"	"	"	"		
62-53-3	Aniline	BRL		µg/kg	870	1	"	"	"	"	"		
120-12-7	Anthracene	BRL		µg/kg	870	1	"	"	"	"	"		
1912-24-9	Atrazine	BRL		µg/kg	870	1	"	"	"	"	"		
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	870	1	"	"	"	"	"		
92-87-5	Benzidine	BRL		µg/kg	870	1	"	"	"	"	"		
56-55-3	Benzo (a) anthracene	BRL		µg/kg	870	1	"	"	"	"	"		
50-32-8	Benzo (a) pyrene	BRL		µg/kg	870	1	"	"	"	"	"		
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	870	1	"	"	"	"	"		
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg	870	1	"	"	"	"	"		
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	870	1	"	"	"	"	"		
65-85-0	Benzoic acid	BRL		µg/kg	870	1	"	"	"	"	"		
100-51-6	Benzyl alcohol	BRL		µg/kg	870	1	"	"	"	"	"		
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	870	1	"	"	"	"	"		
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	870	1	"	"	"	"	"		
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	870	1	"	"	"	"	"		
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	870	1	"	"	"	"	"		
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	870	1	"	"	"	"	"		
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	870	1	"	"	"	"	"		
86-74-8	Carbazole	BRL		µg/kg	870	1	"	"	"	"	"		
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	870	1	"	"	"	"	"		
106-47-8	4-Chloroaniline	BRL		µg/kg	870	1	"	"	"	"	"		
91-58-7	2-Chloronaphthalene	BRL		µg/kg	870	1	"	"	"	"	"		
95-57-8	2-Chlorophenol	BRL		µg/kg	870	1	"	"	"	"	"		
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	870	1	"	"	"	"	"		
218-01-9	Chrysene	BRL		µg/kg	870	1	"	"	"	"	"		
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	870	1	"	"	"	"	"		
132-64-9	Dibenzofuran	BRL		µg/kg	870	1	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	870	1	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	870	1	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	870	1	"	"	"	"	"		
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	870	1	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	870	1	"	"	"	"	"		
84-66-2	Diethyl phthalate	BRL		µg/kg	870	1	"	"	"	"	"		
131-11-3	Dimethyl phthalate	BRL		µg/kg	870	1	"	"	"	"	"		

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Sample IdentificationS-1  
SA59659-03Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:30Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Semivolatile Organic Compounds by GCMS</b>											
<u>Semivolatile Organic Compounds by SW846 8270C</u>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	870	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	870	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	870	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	870	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	870	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	870	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	870	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	870	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	870	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	870	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	870	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	870	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	870	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	870	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	870	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	870	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	870	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	870	1	"	"	"	"	"
108-39-4,	3,4-Methylphenol	BRL		µg/kg	870	1	"	"	"	"	"
106-44-5											
91-20-3	Naphthalene	BRL		µg/kg	870	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	870	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	870	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3480	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	870	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	870	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3480	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	870	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	870	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	870	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	870	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	870	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	870	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	870	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	870	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	870	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	870	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	870	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	61			30-130 %		"	"	"	"	"
367-12-4	2-Fluorophenol	52			15-110 %		"	"	"	"	"
4165-60-0	Nitrobenzene-d5	56			30-130 %		"	"	"	"	"
4165-62-2	Phenol-d5	46			15-110 %		"	"	"	"	"
1718-51-0	Terphenyl-d14	69			30-130 %		"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	57			15-110 %		"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	BRL		mg/kg	0.0295	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.28	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample IdentificationS-1  
SA59659-03Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:30Received  
23-Mar-07

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.214	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.427	1	"	"	"	"	"
7439-92-1	Lead	1.45		mg/kg	0.641	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
TCLP Extraction		Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
% Solids		21.0		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
Specific Conductance (EC)		17.0		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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\* Reportable Detection Limit

BRL = Below Reporting Limit

Page 16 of 50

<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
N-1	SA59659-04	(None)		Sludge	22-Mar-07 12:40		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted		N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon)	BRL		µg/kg	161	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
67-64-1	Acetone	BRL		µg/kg	3220	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg	161	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg	161	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg	161	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg	161	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg	161	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg	161	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg	322	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg	1610	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg	805	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg	161	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg	322	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg	161	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg	322	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg	161	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg	161	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg	322	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg	161	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg	161	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg	161	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg	322	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg	161	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg	161	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg	161	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg	161	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg	161	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg	161	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg	161	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg	161	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg	161	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg	161	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg	161	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	161	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg	1610	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg	161	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg	161	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	1610	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg	1610	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	161	50	"	"	"	"	"

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Sample IdentificationN-1  
SA59659-04Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:40Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg	161	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
100-42-5	Styrene	BRL		µg/kg	161	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	161	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	161	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg	161	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg	161	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	161	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	161	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	161	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg	161	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	161	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	161	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	161	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg	161	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg	322	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg	161	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg	1610	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg	161	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	161	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	161	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg	161	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1610	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg	3220	50	"	"	"	"	"
<i>Surrogate recoveries:</i>											
460-00-4	4-Bromofluorobenzene	100		70-130 %			"	"	"	"	"
2037-26-5	Toluene-d8	101		70-130 %			"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	91		70-130 %			"	"	"	"	"
1868-53-7	Dibromofluoromethane	94		70-130 %			"	"	"	"	"
<b>Extractable Petroleum Hydrocarbons</b>											
<b>TPH 8100 by GC</b>											
Prepared by method SW846 3550B											
8006-61-9	Gasoline	BRL		mg/kg	38.7	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS
68476-30-2	Fuel Oil #2	BRL		mg/kg	38.7	1	"	"	"	"	"
68476-31-3	Fuel Oil #4	BRL		mg/kg	38.7	1	"	"	"	"	"
68553-00-4	Fuel Oil #6	BRL		mg/kg	38.7	1	"	"	"	"	"
M09800000	Motor Oil	BRL		mg/kg	38.7	1	"	"	"	"	"
8032-32-4	Ligroin	BRL		mg/kg	38.7	1	"	"	"	"	"
J00100000	Aviation Fuel	BRL		mg/kg	38.7	1	"	"	"	"	"
	Unidentified	BRL		mg/kg	38.7	1	"	"	"	"	"
	Other Oil	BRL		mg/kg	38.7	1	"	"	"	"	"
	Total Petroleum Hydrocarbons	BRL		mg/kg	38.7	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
3386-33-2	1-Chlorooctadecane	74		40-140 %			"	"	"	"	"
<b>Semivolatile Organic Compounds by GC</b>											
<u>Polychlorinated Biphenyls by SW846 8082</u>											
Prepared by method SW846 3545A											
12674-11-2	PCB 1016	BRL		µg/kg	28.1	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample IdentificationN-1  
SA59659-04Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:40Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
11104-28-2	PCB 1221	BRL		µg/kg	28.1	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		
11141-16-5	PCB 1232	BRL		µg/kg	28.1	1	"	"	"	"	"		
53469-21-9	PCB 1242	BRL		µg/kg	28.1	1	"	"	"	"	"		
12672-29-6	PCB 1248	BRL		µg/kg	28.1	1	"	"	"	"	"		
11097-69-1	PCB 1254	BRL		µg/kg	28.1	1	"	"	"	"	"		
11096-82-5	PCB 1260	BRL		µg/kg	28.1	1	"	"	"	"	"		
37324-23-5	PCB 1262	BRL		µg/kg	28.1	1	"	"	"	"	"		
11100-14-4	PCB 1268	BRL		µg/kg	28.1	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	45		30-150 %		"	"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr)	70		30-150 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds by SW846 8270C</b>													
Prepared by method SW846 3550B													
83-32-9	Acenaphthene	BRL		µg/kg	961	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B		
208-96-8	Acenaphthylene	BRL		µg/kg	961	1	"	"	"	"	"		
62-53-3	Aniline	BRL		µg/kg	961	1	"	"	"	"	"		
120-12-7	Anthracene	BRL		µg/kg	961	1	"	"	"	"	"		
1912-24-9	Atrazine	BRL		µg/kg	961	1	"	"	"	"	"		
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	961	1	"	"	"	"	"		
92-87-5	Benzidine	BRL		µg/kg	961	1	"	"	"	"	"		
56-55-3	Benzo (a) anthracene	BRL		µg/kg	961	1	"	"	"	"	"		
50-32-8	Benzo (a) pyrene	BRL		µg/kg	961	1	"	"	"	"	"		
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	961	1	"	"	"	"	"		
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg	961	1	"	"	"	"	"		
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	961	1	"	"	"	"	"		
65-85-0	Benzoic acid	BRL		µg/kg	961	1	"	"	"	"	"		
100-51-6	Benzyl alcohol	BRL		µg/kg	961	1	"	"	"	"	"		
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	961	1	"	"	"	"	"		
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	961	1	"	"	"	"	"		
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	961	1	"	"	"	"	"		
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	961	1	"	"	"	"	"		
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	961	1	"	"	"	"	"		
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	961	1	"	"	"	"	"		
86-74-8	Carbazole	BRL		µg/kg	961	1	"	"	"	"	"		
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	961	1	"	"	"	"	"		
106-47-8	4-Chloroaniline	BRL		µg/kg	961	1	"	"	"	"	"		
91-58-7	2-Chloronaphthalene	BRL		µg/kg	961	1	"	"	"	"	"		
95-57-8	2-Chlorophenol	BRL		µg/kg	961	1	"	"	"	"	"		
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	961	1	"	"	"	"	"		
218-01-9	Chrysene	BRL		µg/kg	961	1	"	"	"	"	"		
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	961	1	"	"	"	"	"		
132-64-9	Dibenzofuran	BRL		µg/kg	961	1	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	961	1	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	961	1	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	961	1	"	"	"	"	"		
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	961	1	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	961	1	"	"	"	"	"		
84-66-2	Diethyl phthalate	BRL		µg/kg	961	1	"	"	"	"	"		
131-11-3	Dimethyl phthalate	BRL		µg/kg	961	1	"	"	"	"	"		

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<u>Sample Identification</u>		<u>Client Project #</u>	<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>					
N-1	SA59659-04	(None)	Sludge	22-Mar-07 12:40		23-Mar-07					
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	961	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	961	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	961	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	961	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	961	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	961	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	961	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	961	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	961	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	961	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	961	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	961	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	961	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	961	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	961	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	961	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	961	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	961	1	"	"	"	"	"
108-39-4, 106-44-5	3,4-Methylphenol	BRL		µg/kg	961	1	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	961	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	961	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	961	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3840	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	961	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	961	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3840	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	961	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	961	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	961	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	961	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	961	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	961	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	961	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	961	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	961	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	961	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	961	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	60		30-130 %		"	"	"	"	"	"
367-12-4	2-Fluorophenol	53		15-110 %		"	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	55		30-130 %		"	"	"	"	"	"
4165-62-2	Phenol-d5	48		15-110 %		"	"	"	"	"	"
1718-51-0	Terphenyl-d4	70		30-130 %		"	"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	57		15-110 %		"	"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	BRL		mg/kg	0.0291	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.35	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
N-1	SA59659-04	(None)		Sludge	22-Mar-07 12:40		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.226	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.451	1	"	"	"	"	"
7439-92-1	Lead	1.26		mg/kg	0.677	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
TCLP Extraction		Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
% Solids		29.5		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
Specific Conductance (EC)		13.4		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received				
S/E-1	SA59659-05 <th data-cs="2" data-kind="parent">(None)</th> <th data-kind="ghost"></th> <td>Sludge</td> <td data-cs="2" data-kind="parent">22-Mar-07 12:50</td> <td data-kind="ghost"></td> <td data-cs="2" data-kind="parent">23-Mar-07</td> <td data-kind="ghost"></td>	(None)		Sludge	22-Mar-07 12:50		23-Mar-07				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted	N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD	
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon)	BRL		µg/kg	178	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
67-64-1	Acetone	BRL		µg/kg	3560	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg	178	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg	178	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg	178	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg	178	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg	178	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg	178	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg	356	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg	1780	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg	889	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg	178	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg	356	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg	178	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg	356	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg	178	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg	178	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg	356	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg	178	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg	178	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg	178	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg	356	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg	178	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg	178	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg	178	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg	178	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg	178	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg	178	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg	178	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg	178	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg	178	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg	178	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg	178	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	178	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg	1780	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg	178	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg	178	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	1780	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg	1780	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	178	50	"	"	"	"	"

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Sample IdentificationS/E-1  
SA59659-05Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:50Received  
23-Mar-07

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
<u>Volatile Organic Compounds</u>											
Prepared by method SW846 5030 Soil (high level)											
103-65-1	n-Propylbenzene	BRL		µg/kg	178	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
100-42-5	Styrene	BRL		µg/kg	178	50	"	"	"	"	"
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	178	50	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	178	50	"	"	"	"	"
127-18-4	Tetrachloroethene	BRL		µg/kg	178	50	"	"	"	"	"
108-88-3	Toluene	BRL		µg/kg	178	50	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	178	50	"	"	"	"	"
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	178	50	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	178	50	"	"	"	"	"
79-01-6	Trichloroethene	BRL		µg/kg	178	50	"	"	"	"	"
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	178	50	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	178	50	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	178	50	"	"	"	"	"
75-01-4	Vinyl chloride	BRL		µg/kg	178	50	"	"	"	"	"
1330-20-7	m,p-Xylene	BRL		µg/kg	356	50	"	"	"	"	"
95-47-6	o-Xylene	BRL		µg/kg	178	50	"	"	"	"	"
109-99-9	Tetrahydrofuran	BRL		µg/kg	1780	50	"	"	"	"	"
60-29-7	Ethyl ether	BRL		µg/kg	178	50	"	"	"	"	"
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	178	50	"	"	"	"	"
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	178	50	"	"	"	"	"
108-20-3	Di-isopropyl ether	BRL		µg/kg	178	50	"	"	"	"	"
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1780	50	"	"	"	"	"
123-91-1	1,4-Dioxane	BRL		µg/kg	3560	50	"	"	"	"	"
<i>Surrogate recoveries:</i>											
460-00-4	4-Bromofluorobenzene	99			70-130 %		"	"	"	"	"
2037-26-5	Toluene-d8	102			70-130 %		"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	93			70-130 %		"	"	"	"	"
1868-53-7	Dibromofluoromethane	95			70-130 %		"	"	"	"	"
<b>Extractable Petroleum Hydrocarbons</b>											
<u>TPH 8100 by GC</u>											
Prepared by method SW846 3550B											
8006-61-9	Gasoline	BRL		mg/kg	38.5	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS
68476-30-2	Fuel Oil #2	BRL		mg/kg	38.5	1	"	"	"	"	"
68476-31-3	Fuel Oil #4	BRL		mg/kg	38.5	1	"	"	"	"	"
68553-00-4	Fuel Oil #6	BRL		mg/kg	38.5	1	"	"	"	"	"
M09800000	Motor Oil	BRL		mg/kg	38.5	1	"	"	"	"	"
8032-32-4	Ligroin	BRL		mg/kg	38.5	1	"	"	"	"	"
J00100000	Aviation Fuel	BRL		mg/kg	38.5	1	"	"	"	"	"
Unidentified											
Other Oil											
Total Petroleum Hydrocarbons											
<i>Surrogate recoveries:</i>											
3386-33-2	1-Chlorooctadecane	70			40-140 %		"	"	"	"	"
<b>Semivolatile Organic Compounds by GC</b>											
<u>Polychlorinated Biphenyls by SW846 8082</u>											
Prepared by method SW846 3545A											
12674-11-2	PCB 1016	BRL		µg/kg	28.5	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample IdentificationS/E-1  
SA59659-05Client Project #  
(None)Matrix  
SludgeCollection Date/Time  
22-Mar-07 12:50Received  
23-Mar-07

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
11104-28-2	PCB 1221	BRL		µg/kg	28.5	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		
11141-16-5	PCB 1232	BRL		µg/kg	28.5	1	"	"	"	"	"		
53469-21-9	PCB 1242	BRL		µg/kg	28.5	1	"	"	"	"	"		
12672-29-6	PCB 1248	BRL		µg/kg	28.5	1	"	"	"	"	"		
11097-69-1	PCB 1254	BRL		µg/kg	28.5	1	"	"	"	"	"		
11096-82-5	PCB 1260	BRL		µg/kg	28.5	1	"	"	"	"	"		
37324-23-5	PCB 1262	BRL		µg/kg	28.5	1	"	"	"	"	"		
11100-14-4	PCB 1268	BRL		µg/kg	28.5	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	60		30-150 %			"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr)	85		30-150 %			"	"	"	"	"		
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds by SW846 8270C</b>													
Prepared by method SW846 3550B													
83-32-9	Acenaphthene	BRL		µg/kg	956	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B		
208-96-8	Acenaphthylene	BRL		µg/kg	956	1	"	"	"	"	"		
62-53-3	Aniline	BRL		µg/kg	956	1	"	"	"	"	"		
120-12-7	Anthracene	BRL		µg/kg	956	1	"	"	"	"	"		
1912-24-9	Atrazine	BRL		µg/kg	956	1	"	"	"	"	"		
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	956	1	"	"	"	"	"		
92-87-5	Benzidine	BRL		µg/kg	956	1	"	"	"	"	"		
56-55-3	Benzo (a) anthracene	BRL		µg/kg	956	1	"	"	"	"	"		
50-32-8	Benzo (a) pyrene	BRL		µg/kg	956	1	"	"	"	"	"		
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	956	1	"	"	"	"	"		
191-24-2	Benzo (g,h,i) perylene	BRL		µg/kg	956	1	"	"	"	"	"		
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	956	1	"	"	"	"	"		
65-85-0	Benzoic acid	BRL		µg/kg	956	1	"	"	"	"	"		
100-51-6	Benzyl alcohol	BRL		µg/kg	956	1	"	"	"	"	"		
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	956	1	"	"	"	"	"		
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	956	1	"	"	"	"	"		
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	956	1	"	"	"	"	"		
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	956	1	"	"	"	"	"		
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	956	1	"	"	"	"	"		
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	956	1	"	"	"	"	"		
86-74-8	Carbazole	BRL		µg/kg	956	1	"	"	"	"	"		
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	956	1	"	"	"	"	"		
106-47-8	4-Chloroaniline	BRL		µg/kg	956	1	"	"	"	"	"		
91-58-7	2-Chloronaphthalene	BRL		µg/kg	956	1	"	"	"	"	"		
95-57-8	2-Chlorophenol	BRL		µg/kg	956	1	"	"	"	"	"		
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	956	1	"	"	"	"	"		
218-01-9	Chrysene	BRL		µg/kg	956	1	"	"	"	"	"		
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	956	1	"	"	"	"	"		
132-64-9	Dibenzofuran	BRL		µg/kg	956	1	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	956	1	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	956	1	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	956	1	"	"	"	"	"		
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	956	1	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	956	1	"	"	"	"	"		
84-66-2	Diethyl phthalate	BRL		µg/kg	956	1	"	"	"	"	"		
131-11-3	Dimethyl phthalate	BRL		µg/kg	956	1	"	"	"	"	"		

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\* Reportable Detection Limit

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received				
S/E-1	SA59659-05 <th data-cs="2" data-kind="parent">(None)</th> <th data-kind="ghost"></th> <td>Sludge</td> <td data-cs="2" data-kind="parent">22-Mar-07 12:50</td> <td data-kind="ghost"></td> <td>23-Mar-07</td>	(None)		Sludge	22-Mar-07 12:50		23-Mar-07				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	956	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	956	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	956	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	956	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	956	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	956	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	956	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	956	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	956	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	956	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	956	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	956	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	956	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	956	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	956	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	956	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	956	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	956	1	"	"	"	"	"
108-39-4,	3,4-Methylphenol	BRL		µg/kg	956	1	"	"	"	"	"
106-44-5											
91-20-3	Naphthalene	BRL		µg/kg	956	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	956	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	956	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3820	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	956	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	956	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3820	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	956	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	956	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	956	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	956	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	956	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	956	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	956	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	956	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	956	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	956	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	956	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	64		30-130 %		"	"	"	"	"	"
367-12-4	2-Fluorophenol	49		15-110 %		"	"	"	"	"	"
4165-60-0	Nitrobenzene-d5	61		30-130 %		"	"	"	"	"	"
4165-62-2	Phenol-d5	47		15-110 %		"	"	"	"	"	"
1718-51-0	Terphenyl-d14	74		30-130 %		"	"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	59		15-110 %		"	"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	0.0323		mg/kg	0.0299	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.44	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
S/E-1	SA59659-05	(None)		Sludge	22-Mar-07 12:50		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.240	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.481	1	"	"	"	"	"
7439-92-1	Lead	1.27		mg/kg	0.721	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
TCLP Extraction		Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
% Solids		29.6		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
Specific Conductance (EC)		18.4		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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Sample Identification			Client Project #		Matrix	Collection Date/Time		Received			
N/E-1			(None)		Sludge	22-Mar-07 13:00		23-Mar-07			
SA59659-06											
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Volatile Organic Compounds</b>											
	VOC Extraction	Field extracted		N/A		1	VOC	23-Mar-07	23-Mar-07	7031461	BD
<b>Volatile Organic Compounds</b>											
Prepared by method SW846 5030 Soil (high level)											
76-13-1	1,1,2-Trichlorotrifluoroethane (FreonBRL			µg/kg	160	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar
67-64-1	Acetone	BRL		µg/kg	3200	50	"	"	"	"	"
107-13-1	Acrylonitrile	BRL		µg/kg	160	50	"	"	"	"	"
71-43-2	Benzene	BRL		µg/kg	160	50	"	"	"	"	"
108-86-1	Bromobenzene	BRL		µg/kg	160	50	"	"	"	"	"
74-97-5	Bromochloromethane	BRL		µg/kg	160	50	"	"	"	"	"
75-27-4	Bromodichloromethane	BRL		µg/kg	160	50	"	"	"	"	"
75-25-2	Bromoform	BRL		µg/kg	160	50	"	"	"	"	"
74-83-9	Bromomethane	BRL		µg/kg	320	50	"	"	"	"	"
78-93-3	2-Butanone (MEK)	BRL		µg/kg	1600	50	"	"	"	"	"
104-51-8	n-Butylbenzene	BRL		µg/kg	160	50	"	"	"	"	"
135-98-8	sec-Butylbenzene	BRL		µg/kg	160	50	"	"	"	"	"
98-06-6	tert-Butylbenzene	BRL		µg/kg	160	50	"	"	"	"	"
75-15-0	Carbon disulfide	BRL		µg/kg	800	50	"	"	"	"	"
56-23-5	Carbon tetrachloride	BRL		µg/kg	160	50	"	"	"	"	"
108-90-7	Chlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"
75-00-3	Chloroethane	BRL		µg/kg	320	50	"	"	"	"	"
67-66-3	Chloroform	BRL		µg/kg	160	50	"	"	"	"	"
74-87-3	Chloromethane	BRL		µg/kg	320	50	"	"	"	"	"
95-49-8	2-Chlorotoluene	BRL		µg/kg	160	50	"	"	"	"	"
106-43-4	4-Chlorotoluene	BRL		µg/kg	160	50	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	BRL		µg/kg	320	50	"	"	"	"	"
124-48-1	Dibromochloromethane	BRL		µg/kg	160	50	"	"	"	"	"
106-93-4	1,2-Dibromoethane (EDB)	BRL		µg/kg	160	50	"	"	"	"	"
74-95-3	Dibromomethane	BRL		µg/kg	160	50	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"
75-71-8	Dichlorodifluoromethane (Freon12)	BRL		µg/kg	320	50	"	"	"	"	"
75-34-3	1,1-Dichloroethane	BRL		µg/kg	160	50	"	"	"	"	"
107-06-2	1,2-Dichloroethane	BRL		µg/kg	160	50	"	"	"	"	"
75-35-4	1,1-Dichloroethene	BRL		µg/kg	160	50	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	BRL		µg/kg	160	50	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	BRL		µg/kg	160	50	"	"	"	"	"
78-87-5	1,2-Dichloropropane	BRL		µg/kg	160	50	"	"	"	"	"
142-28-9	1,3-Dichloropropane	BRL		µg/kg	160	50	"	"	"	"	"
594-20-7	2,2-Dichloropropane	BRL		µg/kg	160	50	"	"	"	"	"
563-58-6	1,1-Dichloropropene	BRL		µg/kg	160	50	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	BRL		µg/kg	160	50	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	BRL		µg/kg	160	50	"	"	"	"	"
100-41-4	Ethylbenzene	BRL		µg/kg	160	50	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	160	50	"	"	"	"	"
591-78-6	2-Hexanone (MBK)	BRL		µg/kg	1600	50	"	"	"	"	"
98-82-8	Isopropylbenzene	BRL		µg/kg	160	50	"	"	"	"	"
99-87-6	4-Isopropyltoluene	BRL		µg/kg	160	50	"	"	"	"	"
1634-04-4	Methyl tert-butyl ether	BRL		µg/kg	160	50	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	1600	50	"	"	"	"	"
75-09-2	Methylene chloride	BRL		µg/kg	1600	50	"	"	"	"	"
91-20-3	Naphthalene	BRL		µg/kg	160	50	"	"	"	"	"

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received						
N/E-1	SA59659-06	(None)	<td>Sludge</td> <td>22-Mar-07 13:00</td> <td></td> <td>23-Mar-07</td>	Sludge	22-Mar-07 13:00		23-Mar-07						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Volatile Organic Compounds</b>													
<b>Volatile Organic Compounds</b>													
Prepared by method SW846 5030 Soil (high level)													
103-65-1	n-Propylbenzene	BRL		µg/kg	160	50	SW 846 8260B	26-Mar-07	27-Mar-07	7031562	mar		
100-42-5	Styrene	BRL		µg/kg	160	50	"	"	"	"	"		
630-20-6	1,1,1,2-Tetrachloroethane	BRL		µg/kg	160	50	"	"	"	"	"		
79-34-5	1,1,2,2-Tetrachloroethane	BRL		µg/kg	160	50	"	"	"	"	"		
127-18-4	Tetrachloroethylene	BRL		µg/kg	160	50	"	"	"	"	"		
108-88-3	Toluene	BRL		µg/kg	160	50	"	"	"	"	"		
87-61-6	1,2,3-Trichlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"		
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	160	50	"	"	"	"	"		
71-55-6	1,1,1-Trichloroethane	BRL		µg/kg	160	50	"	"	"	"	"		
79-00-5	1,1,2-Trichloroethane	BRL		µg/kg	160	50	"	"	"	"	"		
79-01-6	Trichloroethylene	BRL		µg/kg	160	50	"	"	"	"	"		
75-69-4	Trichlorofluoromethane (Freon 11)	BRL		µg/kg	160	50	"	"	"	"	"		
96-18-4	1,2,3-Trichloropropane	BRL		µg/kg	160	50	"	"	"	"	"		
95-63-6	1,2,4-Trimethylbenzene	BRL		µg/kg	160	50	"	"	"	"	"		
108-67-8	1,3,5-Trimethylbenzene	BRL		µg/kg	160	50	"	"	"	"	"		
75-01-4	Vinyl chloride	BRL		µg/kg	160	50	"	"	"	"	"		
1330-20-7	m,p-Xylene	BRL		µg/kg	320	50	"	"	"	"	"		
95-47-6	o-Xylene	BRL		µg/kg	160	50	"	"	"	"	"		
109-99-9	Tetrahydrofuran	BRL		µg/kg	1600	50	"	"	"	"	"		
60-29-7	Ethyl ether	BRL		µg/kg	160	50	"	"	"	"	"		
994-05-8	Tert-amyl methyl ether	BRL		µg/kg	160	50	"	"	"	"	"		
637-92-3	Ethyl tert-butyl ether	BRL		µg/kg	160	50	"	"	"	"	"		
108-20-3	Di-isopropyl ether	BRL		µg/kg	160	50	"	"	"	"	"		
75-65-0	Tert-Butanol / butyl alcohol	BRL		µg/kg	1600	50	"	"	"	"	"		
123-91-1	1,4-Dioxane	BRL		µg/kg	3200	50	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	99		70-130 %		"	"	"	"	"	"		
2037-26-5	Toluene-d8	103		70-130 %		"	"	"	"	"	"		
17060-07-0	1,2-Dichloroethane-d4	93		70-130 %		"	"	"	"	"	"		
1868-53-7	Dibromofluoromethane	95		70-130 %		"	"	"	"	"	"		
<b>Extractable Petroleum Hydrocarbons</b>													
<b>TPH 8100 by GC</b>													
Prepared by method SW846 3550B													
8006-61-9	Gasoline	BRL		mg/kg	38.8	1	+SW846 8100Mod.	26-Mar-07	27-Mar-07	7031506	DS		
68476-30-2	Fuel Oil #2	BRL		mg/kg	38.8	1	"	"	"	"	"		
68476-31-3	Fuel Oil #4	BRL		mg/kg	38.8	1	"	"	"	"	"		
68553-00-4	Fuel Oil #6	BRL		mg/kg	38.8	1	"	"	"	"	"		
M09800000	Motor Oil	BRL		mg/kg	38.8	1	"	"	"	"	"		
8032-32-4	Ligroin	BRL		mg/kg	38.8	1	"	"	"	"	"		
J00100000	Aviation Fuel	BRL		mg/kg	38.8	1	"	"	"	"	"		
Unidentified		BRL		mg/kg	38.8	1	"	"	"	"	"		
Other Oil		BRL		mg/kg	38.8	1	"	"	"	"	"		
Total Petroleum Hydrocarbons		BRL		mg/kg	38.8	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
3386-33-2	1-Chlorooctadecane	84		40-140 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GC</b>													
<u>Polychlorinated Biphenyls by SW846 8082</u>													
Prepared by method SW846 3545A													
12674-11-2	PCB 1016	BRL		µg/kg	27.7	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received						
N/E-1	SA59659-06	(None)		Sludge	22-Mar-07 13:00		23-Mar-07						
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst		
<b>Semivolatile Organic Compounds by GC</b>													
<b>Polychlorinated Biphenyls by SW846 8082</b>													
Prepared by method SW846 3545A													
11104-28-2	PCB 1221	BRL		µg/kg	27.7	1	SW846 8082	26-Mar-07	27-Mar-07	7031507	SM		
11141-16-5	PCB 1232	BRL		µg/kg	27.7	1	"	"	"	"	"		
53469-21-9	PCB 1242	BRL		µg/kg	27.7	1	"	"	"	"	"		
12672-29-6	PCB 1248	BRL		µg/kg	27.7	1	"	"	"	"	"		
11097-69-1	PCB 1254	BRL		µg/kg	27.7	1	"	"	"	"	"		
11096-82-5	PCB 1260	BRL		µg/kg	27.7	1	"	"	"	"	"		
37324-23-5	PCB 1262	BRL		µg/kg	27.7	1	"	"	"	"	"		
11100-14-4	PCB 1268	BRL		µg/kg	27.7	1	"	"	"	"	"		
<i>Surrogate recoveries:</i>													
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	70		30-150 %		"	"	"	"	"	"		
2051-24-3	Decachlorobiphenyl (Sr)	90		30-150 %		"	"	"	"	"	"		
<b>Semivolatile Organic Compounds by GCMS</b>													
<b>Semivolatile Organic Compounds by SW846 8270C</b>													
Prepared by method SW846 3550B													
83-32-9	Acenaphthene	BRL		µg/kg	962	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B		
208-96-8	Acenaphthylene	BRL		µg/kg	962	1	"	"	"	"	"		
62-53-3	Aniline	BRL		µg/kg	962	1	"	"	"	"	"		
120-12-7	Anthracene	BRL		µg/kg	962	1	"	"	"	"	"		
1912-24-9	Atrazine	BRL		µg/kg	962	1	"	"	"	"	"		
103-33-3	Azobenzene/Diphenyldiazine	BRL		µg/kg	962	1	"	"	"	"	"		
92-87-5	Benzidine	BRL		µg/kg	962	1	"	"	"	"	"		
56-55-3	Benzo (a) anthracene	BRL		µg/kg	962	1	"	"	"	"	"		
50-32-8	Benzo (a) pyrene	BRL		µg/kg	962	1	"	"	"	"	"		
205-99-2	Benzo (b) fluoranthene	BRL		µg/kg	962	1	"	"	"	"	"		
191-24-2	Benzo (g,h,i) perlylene	BRL		µg/kg	962	1	"	"	"	"	"		
207-08-9	Benzo (k) fluoranthene	BRL		µg/kg	962	1	"	"	"	"	"		
65-85-0	Benzoic acid	BRL		µg/kg	962	1	"	"	"	"	"		
100-51-6	Benzyl alcohol	BRL		µg/kg	962	1	"	"	"	"	"		
111-91-1	Bis(2-chloroethoxy)methane	BRL		µg/kg	962	1	"	"	"	"	"		
111-44-4	Bis(2-chloroethyl)ether	BRL		µg/kg	962	1	"	"	"	"	"		
39638-32-9	Bis(2-chloroisopropyl)ether	BRL		µg/kg	962	1	"	"	"	"	"		
117-81-7	Bis(2-ethylhexyl)phthalate	BRL		µg/kg	962	1	"	"	"	"	"		
101-55-3	4-Bromophenyl phenyl ether	BRL		µg/kg	962	1	"	"	"	"	"		
85-68-7	Butyl benzyl phthalate	BRL		µg/kg	962	1	"	"	"	"	"		
86-74-8	Carbazole	BRL		µg/kg	962	1	"	"	"	"	"		
59-50-7	4-Chloro-3-methylphenol	BRL		µg/kg	962	1	"	"	"	"	"		
106-47-8	4-Chloroaniline	BRL		µg/kg	962	1	"	"	"	"	"		
91-58-7	2-Chloronaphthalene	BRL		µg/kg	962	1	"	"	"	"	"		
95-57-8	2-Chlorophenol	BRL		µg/kg	962	1	"	"	"	"	"		
7005-72-3	4-Chlorophenyl phenyl ether	BRL		µg/kg	962	1	"	"	"	"	"		
218-01-9	Chrysene	BRL		µg/kg	962	1	"	"	"	"	"		
53-70-3	Dibenzo (a,h) anthracene	BRL		µg/kg	962	1	"	"	"	"	"		
132-64-9	Dibenzofuran	BRL		µg/kg	962	1	"	"	"	"	"		
95-50-1	1,2-Dichlorobenzene	BRL		µg/kg	962	1	"	"	"	"	"		
541-73-1	1,3-Dichlorobenzene	BRL		µg/kg	962	1	"	"	"	"	"		
106-46-7	1,4-Dichlorobenzene	BRL		µg/kg	962	1	"	"	"	"	"		
91-94-1	3,3'-Dichlorobenzidine	BRL		µg/kg	962	1	"	"	"	"	"		
120-83-2	2,4-Dichlorophenol	BRL		µg/kg	962	1	"	"	"	"	"		
84-66-2	Diethyl phthalate	BRL		µg/kg	962	1	"	"	"	"	"		
131-11-3	Dimethyl phthalate	BRL		µg/kg	962	1	"	"	"	"	"		

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Sample Identification		Client Project #		Matrix	Collection Date/Time		Received				
N/E-1	SA59659-06	(None)		Sludge	22-Mar-07 13:00		23-Mar-07				
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	Dilution	Method Ref.	Prepared	Analyzed	Batch	Analyst
<b>Semivolatile Organic Compounds by GCMS</b>											
<b>Semivolatile Organic Compounds by SW846 8270C</b>											
Prepared by method SW846 3550B											
105-67-9	2,4-Dimethylphenol	BRL		µg/kg	962	1	SW846 8270C	26-Mar-07	27-Mar-07	7031508	M.B
84-74-2	Di-n-butyl phthalate	BRL		µg/kg	962	1	"	"	"	"	"
534-52-1	4,6-Dinitro-2-methylphenol	BRL		µg/kg	962	1	"	"	"	"	"
51-28-5	2,4-Dinitrophenol	BRL		µg/kg	962	1	"	"	"	"	"
121-14-2	2,4-Dinitrotoluene	BRL		µg/kg	962	1	"	"	"	"	"
606-20-2	2,6-Dinitrotoluene	BRL		µg/kg	962	1	"	"	"	"	"
117-84-0	Di-n-octyl phthalate	BRL		µg/kg	962	1	"	"	"	"	"
206-44-0	Fluoranthene	BRL		µg/kg	962	1	"	"	"	"	"
86-73-7	Fluorene	BRL		µg/kg	962	1	"	"	"	"	"
118-74-1	Hexachlorobenzene	BRL		µg/kg	962	1	"	"	"	"	"
87-68-3	Hexachlorobutadiene	BRL		µg/kg	962	1	"	"	"	"	"
77-47-4	Hexachlorocyclopentadiene	BRL		µg/kg	962	1	"	"	"	"	"
67-72-1	Hexachloroethane	BRL		µg/kg	962	1	"	"	"	"	"
193-39-5	Indeno (1,2,3-cd) pyrene	BRL		µg/kg	962	1	"	"	"	"	"
90-12-0	1-Methylnaphthalene	BRL		µg/kg	962	1	"	"	"	"	"
78-59-1	Isophorone	BRL		µg/kg	962	1	"	"	"	"	"
91-57-6	2-Methylnaphthalene	BRL		µg/kg	962	1	"	"	"	"	"
95-48-7	2-Methylphenol	BRL		µg/kg	962	1	"	"	"	"	"
108-39-4,	3,4-Methylphenol	BRL		µg/kg	962	1	"	"	"	"	"
106-44-5											
91-20-3	Naphthalene	BRL		µg/kg	962	1	"	"	"	"	"
88-74-4	2-Nitroaniline	BRL		µg/kg	962	1	"	"	"	"	"
99-09-2	3-Nitroaniline	BRL		µg/kg	962	1	"	"	"	"	"
100-01-6	4-Nitroaniline	BRL		µg/kg	3850	1	"	"	"	"	"
98-95-3	Nitrobenzene	BRL		µg/kg	962	1	"	"	"	"	"
88-75-5	2-Nitrophenol	BRL		µg/kg	962	1	"	"	"	"	"
100-02-7	4-Nitrophenol	BRL		µg/kg	3850	1	"	"	"	"	"
62-75-9	N-Nitrosodimethylamine	BRL		µg/kg	962	1	"	"	"	"	"
621-64-7	N-Nitrosodi-n-propylamine	BRL		µg/kg	962	1	"	"	"	"	"
86-30-6	N-Nitrosodiphenylamine	BRL		µg/kg	962	1	"	"	"	"	"
87-86-5	Pentachlorophenol	BRL		µg/kg	962	1	"	"	"	"	"
85-01-8	Phenanthrene	BRL		µg/kg	962	1	"	"	"	"	"
108-95-2	Phenol	BRL		µg/kg	962	1	"	"	"	"	"
129-00-0	Pyrene	BRL		µg/kg	962	1	"	"	"	"	"
110-86-1	Pyridine	BRL		µg/kg	962	1	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	BRL		µg/kg	962	1	"	"	"	"	"
95-95-4	2,4,5-Trichlorophenol	BRL		µg/kg	962	1	"	"	"	"	"
88-06-2	2,4,6-Trichlorophenol	BRL		µg/kg	962	1	"	"	"	"	"
<i>Surrogate recoveries:</i>											
321-60-8	2-Fluorobiphenyl	64		30-130 %			"	"	"	"	"
367-12-4	2-Fluorophenol	52		15-110 %			"	"	"	"	"
4165-60-0	Nitrobenzene-d5	59		30-130 %			"	"	"	"	"
4165-62-2	Phenol-d5	48		15-110 %			"	"	"	"	"
1718-51-0	Terphenyl-d14	74		30-130 %			"	"	"	"	"
118-79-6	2,4,6-Tribromophenol	59		15-110 %			"	"	"	"	"
<b>Total Metals by EPA 6000/7000 Series Methods</b>											
7439-97-6	Mercury	0.0304		mg/kg	0.0291	1	SW846 7471A	26-Mar-07	27-Mar-07	7031479	YP
<b>Total Metals by EPA 200 Series Methods</b>											
7440-38-2	Arsenic	BRL		mg/kg	1.27	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
N/E-1	SA59659-06	(None)		Sludge	22-Mar-07 13:00		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Total Metals by EPA 200 Series Methods</b>											
7440-43-9	Cadmium	BRL		mg/kg	0.212	1	EPA 200.7	26-Mar-07	26-Mar-07	7031478	HB
7440-47-3	Chromium	BRL		mg/kg	0.425	1	"	"	"	"	"
7439-92-1	Lead	1.85		mg/kg	0.637	1	"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
TCLP Extraction		Completed		N/A		1	SW846 1311	23-Mar-07	23-Mar-07	7031453	BD
7440-47-3	Chromium	BRL		mg/l	0.0050	1	SW846 1311/6010B	26-Mar-07	26-Mar-07	7031541	HB
<b>General Chemistry Parameters</b>											
% Solids		24.0		%		1	SM2540 G Mod.	24-Mar-07	24-Mar-07	7031468	QP
Specific Conductance (EC)		17.4		uS/cm		1	SM2510B	27-Mar-07	27-Mar-07	7031625	BD

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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<u>Sample Identification</u>		<u>Client Project #</u>		<u>Matrix</u>	<u>Collection Date/Time</u>		<u>Received</u>				
Composite 01-06 SA59659-07		(None)		Sludge	22-Mar-07 00:00		23-Mar-07				
<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Batch</u>	<u>Analyst</u>
<b>Semivolatile Organic Compounds by GC</b>											
	TCLP Extraction	Completed		N/A		1	SW846 1311	09-Apr-07	09-Apr-07	7040549	BD
<b>TCLP Herbicides by SW846 1311/8151A</b>											
Prepared by method SW846 3535											
93-72-1	2,4,5-TP (Silvex)	BRL		µg/l	0.100	1	SW846 1311/8151A	10-Apr-07	10-Apr-07	7040572	MP
<i>Surrogate recoveries:</i>											
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	40		30-150 %			"	"	"	"	"
<b>TCLP Metals by EPA 1311 &amp; 6000/7000 Series Methods</b>											
	TCLP Extraction	Completed		N/A		1	SW846 1311	09-Apr-07	09-Apr-07	7040551	BD
7440-22-4	Silver	BRL		mg/l	0.0100	1	SW846 1311/6010B	10-Apr-07	10-Apr-07	7040588	HB
7440-38-2	Arsenic	BRL		mg/l	0.0150	1	"	"	"	"	"
7440-39-3	Barium	0.122		mg/l	0.0100	1	"	"	"	"	"
7440-41-7	Beryllium	BRL		mg/l	0.0040	1	"	"	"	"	"
7440-43-9	Cadmium	BRL		mg/l	0.0025	1	"	"	"	"	"
7440-47-3	Chromium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-50-8	Copper	0.0055		mg/l	0.0050	1	"	"	"	"	"
7439-97-6	Mercury	BRL		mg/l	0.00040	1	SW846 1311/7470A	"	11-Apr-07	7040589	BT
7440-02-0	Nickel	0.0052		mg/l	0.0050	1	SW846 1311/6010B	"	10-Apr-07	7040588	HB
7439-92-1	Lead	0.0192		mg/l	0.0075	1	"	"	"	"	"
7440-36-0	Antimony	0.0066		mg/l	0.0060	1	"	"	"	"	"
7782-49-2	Selenium	BRL		mg/l	0.0150	1	"	"	"	"	"
7440-28-0	Thallium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-62-2	Vanadium	BRL		mg/l	0.0050	1	"	"	"	"	"
7440-66-6	Zinc	0.166		mg/l	0.0050	1	"	"	"	"	"

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### Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD
<b>Batch 7031562 - SW846 5030 Soil (high level)</b>									
<b>Blank (7031562-BLK1)</b>									
Prepared & Analyzed: 26-Mar-07									
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL		µg/kg	1.0					
Acetone	BRL		µg/kg	20.0					
Acrylonitrile	BRL		µg/kg	1.0					
Benzene	BRL		µg/kg	1.0					
Bromobenzene	BRL		µg/kg	1.0					
Bromochloromethane	BRL		µg/kg	1.0					
Bromodichloromethane	BRL		µg/kg	1.0					
Bromoform	BRL		µg/kg	1.0					
Bromomethane	BRL		µg/kg	2.0					
2-Butanone (MEK)	BRL		µg/kg	10.0					
n-Butylbenzene	BRL		µg/kg	1.0					
sec-Butylbenzene	BRL		µg/kg	1.0					
tert-Butylbenzene	BRL		µg/kg	1.0					
Carbon disulfide	BRL		µg/kg	5.0					
Carbon tetrachloride	BRL		µg/kg	1.0					
Chlorobenzene	BRL		µg/kg	1.0					
Chloroethane	BRL		µg/kg	2.0					
Chloroform	BRL		µg/kg	1.0					
Chloromethane	BRL		µg/kg	2.0					
2-Chlorotoluene	BRL		µg/kg	1.0					
4-Chlorotoluene	BRL		µg/kg	1.0					
1,2-Dibromo-3-chloropropane	BRL		µg/kg	2.0					
Dibromochloromethane	BRL		µg/kg	1.0					
1,2-Dibromoethane (EDB)	BRL		µg/kg	1.0					
Dibromomethane	BRL		µg/kg	1.0					
1,2-Dichlorobenzene	BRL		µg/kg	1.0					
1,3-Dichlorobenzene	BRL		µg/kg	1.0					
1,4-Dichlorobenzene	BRL		µg/kg	1.0					
Dichlorodifluoromethane (Freon12)	BRL		µg/kg	2.0					
1,1-Dichloroethane	BRL		µg/kg	1.0					
1,2-Dichloroethane	BRL		µg/kg	1.0					
1,1-Dichloroethene	BRL		µg/kg	1.0					
cis-1,2-Dichloroethene	BRL		µg/kg	1.0					
trans-1,2-Dichloroethene	BRL		µg/kg	1.0					
1,2-Dichloropropane	BRL		µg/kg	1.0					
1,3-Dichloropropane	BRL		µg/kg	1.0					
2,2-Dichloropropane	BRL		µg/kg	1.0					
1,1-Dichloropropene	BRL		µg/kg	1.0					
cis-1,3-Dichloropropene	BRL		µg/kg	1.0					
trans-1,3-Dichloropropene	BRL		µg/kg	1.0					
Ethylbenzene	BRL		µg/kg	1.0					
Hexachlorobutadiene	BRL		µg/kg	1.0					
2-Hexanone (MBK)	BRL		µg/kg	10.0					
Isopropylbenzene	BRL		µg/kg	1.0					
4-Isopropyltoluene	BRL		µg/kg	1.0					
Methyl tert-butyl ether	BRL		µg/kg	1.0					
4-Methyl-2-pentanone (MIBK)	BRL		µg/kg	10.0					
Methylene chloride	BRL		µg/kg	10.0					
Naphthalene	BRL		µg/kg	1.0					
n-Propylbenzene	BRL		µg/kg	1.0					
Styrene	BRL		µg/kg	1.0					

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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## Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031562 - SW846 5030 Soil (high level)</b>										
<u><b>Blank (7031562-BLK1)</b></u>										
Prepared & Analyzed: 26-Mar-07										
1,1,1,2-Tetrachloroethane	BRL		µg/kg		1.0					
1,1,2,2-Tetrachloroethane	BRL		µg/kg		1.0					
Tetrachloroethene	BRL		µg/kg		1.0					
Toluene	BRL		µg/kg		1.0					
1,2,3-Trichlorobenzene	BRL		µg/kg		1.0					
1,2,4-Trichlorobenzene	BRL		µg/kg		1.0					
1,1,1-Trichloroethane	BRL		µg/kg		1.0					
1,1,2-Trichloroethane	BRL		µg/kg		1.0					
Trichloroethene	BRL		µg/kg		1.0					
Trichlorofluoromethane (Freon 11)	BRL		µg/kg		1.0					
1,2,3-Trichloropropane	BRL		µg/kg		1.0					
1,2,4-Trimethylbenzene	BRL		µg/kg		1.0					
1,3,5-Trimethylbenzene	BRL		µg/kg		1.0					
Vinyl chloride	BRL		µg/kg		1.0					
m,p-Xylene	BRL		µg/kg		2.0					
o-Xylene	BRL		µg/kg		1.0					
Tetrahydrofuran	BRL		µg/kg		10.0					
Ethyl ether	BRL		µg/kg		1.0					
Tert-amyl methyl ether	BRL		µg/kg		1.0					
Ethyl tert-butyl ether	BRL		µg/kg		1.0					
Di-isopropyl ether	BRL		µg/kg		1.0					
Tert-Butanol / butyl alcohol	BRL		µg/kg		10.0					
1,4-Dioxane	BRL		µg/kg		20.0					
Surrogate: 4-Bromofluorobenzene	30.1		µg/kg		30.0		100	70-130		
Surrogate: Toluene-d8	29.4		µg/kg		30.0		98	70-130		
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/kg		30.0		91	70-130		
Surrogate: Dibromofluoromethane	28.2		µg/kg		30.0		94	70-130		
<u><b>LCS (7031562-BS1)</b></u>										
Prepared & Analyzed: 26-Mar-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.8		µg/kg		20.0		94	70-130		
Acetone	13.2		µg/kg		20.0		66	1.77-175		
Acrylonitrile	20.4		µg/kg		20.0		102	70-130		
Benzene	22.2		µg/kg		20.0		111	70-130		
Bromobenzene	22.6		µg/kg		20.0		113	70-130		
Bromochloromethane	21.2		µg/kg		20.0		106	70-130		
Bromodichloromethane	22.8		µg/kg		20.0		114	70-130		
Bromoform	23.0		µg/kg		20.0		115	70-130		
Bromomethane	22.9		µg/kg		20.0		114	55.3-136		
2-Butanone (MEK)	15.9		µg/kg		20.0		80	38.8-142		
n-Butylbenzene	18.3		µg/kg		20.0		92	70-130		
sec-Butylbenzene	19.9		µg/kg		20.0		100	70-130		
tert-Butylbenzene	21.1		µg/kg		20.0		106	70-130		
Carbon disulfide	18.6		µg/kg		20.0		93	70-130		
Carbon tetrachloride	17.5		µg/kg		20.0		88	70-130		
Chlorobenzene	22.0		µg/kg		20.0		110	70-130		
Chloroethane	18.7		µg/kg		20.0		94	55.3-130		
Chloroform	20.5		µg/kg		20.0		102	70-130		
Chloromethane	20.5		µg/kg		20.0		102	70-130		
2-Chlorotoluene	21.4		µg/kg		20.0		107	70-130		
4-Chlorotoluene	21.4		µg/kg		20.0		107	70-130		
1,2-Dibromo-3-chloropropane	20.7		µg/kg		20.0		104	70-130		

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\* Reportable Detection Limit      BRL = Below Reporting Limit

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### Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit
<b>Batch 7031562 - SW846 5030 Soil (high level)</b>										
<b>LCS (7031562-BS1)</b>										
Prepared & Analyzed: 26-Mar-07										
Dibromochloromethane	22.3		µg/kg		20.0	112	64.7-139			
1,2-Dibromoethane (EDB)	22.7		µg/kg		20.0	114	70-130			
Dibromomethane	21.4		µg/kg		20.0	107	70-130			
1,2-Dichlorobenzene	22.4		µg/kg		20.0	112	70-130			
1,3-Dichlorobenzene	21.9		µg/kg		20.0	110	70-130			
1,4-Dichlorobenzene	21.6		µg/kg		20.0	108	70-130			
Dichlorodifluoromethane (Freon12)	20.3		µg/kg		20.0	102	34.4-167			
1,1-Dichloroethane	20.2		µg/kg		20.0	101	70-130			
1,2-Dichloroethane	19.6		µg/kg		20.0	98	70-130			
1,1-Dichloroethene	18.1		µg/kg		20.0	90	70-130			
cis-1,2-Dichloroethene	21.3		µg/kg		20.0	106	70-130			
trans-1,2-Dichloroethene	19.7		µg/kg		20.0	98	70-130			
1,2-Dichloropropane	22.3		µg/kg		20.0	112	70-130			
1,3-Dichloropropane	22.4		µg/kg		20.0	112	70-130			
2,2-Dichloropropane	16.8		µg/kg		20.0	84	70-130			
1,1-Dichloropropene	21.6		µg/kg		20.0	108	70-130			
cis-1,3-Dichloropropene	20.7		µg/kg		20.0	104	70-130			
trans-1,3-Dichloropropene	21.1		µg/kg		20.0	106	70-130			
Ethylbenzene	21.5		µg/kg		20.0	108	70-130			
Hexachlorobutadiene	19.0		µg/kg		20.0	95	60.7-140			
2-Hexanone (MBK)	15.0		µg/kg		20.0	75	70-130			
Isopropylbenzene	20.3		µg/kg		20.0	102	70-130			
4-Isopropyltoluene	20.4		µg/kg		20.0	102	70-130			
Methyl tert-butyl ether	20.5		µg/kg		20.0	102	70-130			
4-Methyl-2-pentanone (MIBK)	19.3		µg/kg		20.0	96	46.1-145			
Methylene chloride	18.9		µg/kg		20.0	94	70-130			
Naphthalene	21.0		µg/kg		20.0	105	70-130			
n-Propylbenzene	18.4		µg/kg		20.0	92	70-130			
Styrene	23.6		µg/kg		20.0	118	70-130			
1,1,1,2-Tetrachloroethane	22.6		µg/kg		20.0	113	70-130			
1,1,2,2-Tetrachloroethane	22.1		µg/kg		20.0	110	70-130			
Tetrachloroethene	19.1		µg/kg		20.0	96	70-130			
Toluene	20.6		µg/kg		20.0	103	70-130			
1,2,3-Trichlorobenzene	20.5		µg/kg		20.0	102	70-130			
1,2,4-Trichlorobenzene	20.0		µg/kg		20.0	100	70-130			
1,1,1-Trichloroethane	18.4		µg/kg		20.0	92	70-130			
1,1,2-Trichloroethane	23.0		µg/kg		20.0	115	70-130			
Trichloroethene	21.7		µg/kg		20.0	108	70-130			
Trichlorofluoromethane (Freon 11)	17.6		µg/kg		20.0	88	56.8-140			
1,2,3-Trichloropropane	24.5		µg/kg		20.0	122	70-130			
1,2,4-Trimethylbenzene	21.5		µg/kg		20.0	108	70-130			
1,3,5-Trimethylbenzene	21.9		µg/kg		20.0	110	70-130			
Vinyl chloride	19.1		µg/kg		20.0	96	70-130			
m,p-Xylene	43.7		µg/kg		40.0	109	70-130			
o-Xylene	22.9		µg/kg		20.0	114	70-130			
Tetrahydrofuran	23.8		µg/kg		20.0	119	70-130			
Ethyl ether	20.7		µg/kg		20.0	104	65.3-130			
Tert-amyl methyl ether	21.0		µg/kg		20.0	105	70-130			
Ethyl tert-butyl ether	20.9		µg/kg		20.0	104	70-130			
Di-isopropyl ether	19.5		µg/kg		20.0	98	70-130			
Tert-Butanol / butyl alcohol	203		µg/kg		200	102	70-130			

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### Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit
<b>Batch 7031562 - SW846 5030 Soil (high level)</b>										
<b>LCS (7031562-BS1)</b>										
Prepared & Analyzed: 26-Mar-07										
1,4-Dioxane	206		µg/kg		200		103	34-155		
Surrogate: 4-Bromofluorobenzene	30.5		µg/kg		30.0		102	70-130		
Surrogate: Toluene-d8	30.5		µg/kg		30.0		102	70-130		
Surrogate: 1,2-Dichloroethane-d4	27.0		µg/kg		30.0		90	70-130		
Surrogate: Dibromofluoromethane	28.7		µg/kg		30.0		96	70-130		
<b>LCS Dup (7031562-BSD1)</b>										
Prepared & Analyzed: 26-Mar-07										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.0		µg/kg		20.0		95	70-130	1	25
Acetone	15.4		µg/kg		20.0		77	1.77-175	15	50
Acrylonitrile	20.2		µg/kg		20.0		101	70-130	1	25
Benzene	22.7		µg/kg		20.0		114	70-130	3	25
Bromobenzene	22.9		µg/kg		20.0		114	70-130	0.9	25
Bromochloromethane	21.1		µg/kg		20.0		106	70-130	0	25
Bromodichloromethane	22.5		µg/kg		20.0		112	70-130	2	25
Bromoform	23.3		µg/kg		20.0		116	70-130	0.9	25
Bromomethane	22.6		µg/kg		20.0		113	55.3-136	0.9	50
2-Butanone (MEK)	15.5		µg/kg		20.0		78	38.8-142	3	50
n-Butylbenzene	19.3		µg/kg		20.0		96	70-130	4	25
sec-Butylbenzene	20.3		µg/kg		20.0		102	70-130	2	25
tert-Butylbenzene	21.4		µg/kg		20.0		107	70-130	0.9	25
Carbon disulfide	19.0		µg/kg		20.0		95	70-130	2	25
Carbon tetrachloride	17.7		µg/kg		20.0		88	70-130	0	25
Chlorobenzene	22.5		µg/kg		20.0		112	70-130	2	25
Chloroethane	19.7		µg/kg		20.0		98	55.3-130	4	50
Chloroform	21.0		µg/kg		20.0		105	70-130	3	25
Chloromethane	20.9		µg/kg		20.0		104	70-130	2	25
2-Chlorotoluene	22.2		µg/kg		20.0		111	70-130	4	25
4-Chlorotoluene	22.2		µg/kg		20.0		111	70-130	4	25
1,2-Dibromo-3-chloropropane	21.7		µg/kg		20.0		108	70-130	4	25
Dibromochloromethane	22.6		µg/kg		20.0		113	64.7-139	0.9	50
1,2-Dibromoethane (EDB)	22.8		µg/kg		20.0		114	70-130	0	25
Dibromomethane	21.0		µg/kg		20.0		105	70-130	2	25
1,2-Dichlorobenzene	22.9		µg/kg		20.0		114	70-130	2	25
1,3-Dichlorobenzene	22.5		µg/kg		20.0		112	70-130	2	25
1,4-Dichlorobenzene	22.3		µg/kg		20.0		112	70-130	4	25
Dichlorodifluoromethane (Freon12)	20.8		µg/kg		20.0		104	34.4-167	2	50
1,1-Dichloroethane	20.3		µg/kg		20.0		102	70-130	1	25
1,2-Dichloroethane	20.0		µg/kg		20.0		100	70-130	2	25
1,1-Dichloroethene	18.9		µg/kg		20.0		94	70-130	4	25
cis-1,2-Dichloroethene	21.4		µg/kg		20.0		107	70-130	0.9	25
trans-1,2-Dichloroethene	20.3		µg/kg		20.0		102	70-130	4	25
1,2-Dichloropropane	22.3		µg/kg		20.0		112	70-130	0	25
1,3-Dichloropropane	22.4		µg/kg		20.0		112	70-130	0	25
2,2-Dichloropropane	17.4		µg/kg		20.0		87	70-130	4	25
1,1-Dichloropropene	21.7		µg/kg		20.0		108	70-130	0	25
cis-1,3-Dichloropropene	21.1		µg/kg		20.0		106	70-130	2	25
trans-1,3-Dichloropropene	21.3		µg/kg		20.0		106	70-130	0	25
Ethylbenzene	21.9		µg/kg		20.0		110	70-130	2	25
Hexachlorobutadiene	20.1		µg/kg		20.0		100	60.7-140	5	50
2-Hexanone (MBK)	14.3		µg/kg		20.0		72	70-130	4	25
Isopropylbenzene	20.6		µg/kg		20.0		103	70-130	1	25

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### Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit
<b>Batch 7031562 - SW846 5030 Soil (high level)</b>										
<b>LCS Dup (7031562-BSD1)</b>										
Prepared & Analyzed: 26-Mar-07										
4-Isopropyltoluene	21.1		µg/kg		20.0	106	70-130	4	25	
Methyl tert-butyl ether	21.2		µg/kg		20.0	106	70-130	4	25	
4-Methyl-2-pentanone (MIBK)	19.7		µg/kg		20.0	98	46.1-145	2	50	
Methylene chloride	19.0		µg/kg		20.0	95	70-130	1	25	
Naphthalene	21.7		µg/kg		20.0	108	70-130	3	25	
n-Propylbenzene	18.9		µg/kg		20.0	94	70-130	2	25	
Styrene	24.2		µg/kg		20.0	121	70-130	3	25	
1,1,1,2-Tetrachloroethane	22.8		µg/kg		20.0	114	70-130	0.9	25	
1,1,2,2-Tetrachloroethane	22.2		µg/kg		20.0	111	70-130	0.9	25	
Tetrachloroethene	19.4		µg/kg		20.0	97	70-130	1	25	
Toluene	20.6		µg/kg		20.0	103	70-130	0	25	
1,2,3-Trichlorobenzene	21.3		µg/kg		20.0	106	70-130	4	25	
1,2,4-Trichlorobenzene	21.3		µg/kg		20.0	106	70-130	6	25	
1,1,1-Trichloroethane	19.0		µg/kg		20.0	95	70-130	3	25	
1,1,2-Trichloroethane	22.4		µg/kg		20.0	112	70-130	3	25	
Trichloroethene	21.8		µg/kg		20.0	109	70-130	0.9	25	
Trichlorofluoromethane (Freon 11)	17.9		µg/kg		20.0	90	56.8-140	2	50	
1,2,3-Trichloropropane	24.2		µg/kg		20.0	121	70-130	0.8	25	
1,2,4-Trimethylbenzene	22.2		µg/kg		20.0	111	70-130	3	25	
1,3,5-Trimethylbenzene	22.4		µg/kg		20.0	112	70-130	2	25	
Vinyl chloride	19.7		µg/kg		20.0	98	70-130	2	25	
m,p-Xylene	44.4		µg/kg		40.0	111	70-130	2	25	
o-Xylene	22.8		µg/kg		20.0	114	70-130	0	25	
Tetrahydrofuran	23.1		µg/kg		20.0	116	70-130	3	25	
Ethyl ether	21.1		µg/kg		20.0	106	65.3-130	2	50	
Tert-amyl methyl ether	20.7		µg/kg		20.0	104	70-130	1	25	
Ethyl tert-butyl ether	21.0		µg/kg		20.0	105	70-130	1	25	
Di-isopropyl ether	19.5		µg/kg		20.0	98	70-130	0	25	
Tert-Butanol / butyl alcohol	203		µg/kg		200	102	70-130	0	25	
1,4-Dioxane	196		µg/kg		200	98	34-155	5	25	
Surrogate: 4-Bromofluorobenzene	31.0		µg/kg		30.0	103	70-130			
Surrogate: Toluene-d8	29.6		µg/kg		30.0	99	70-130			
Surrogate: 1,2-Dichloroethane-d4	27.4		µg/kg		30.0	91	70-130			
Surrogate: Dibromofluoromethane	28.6		µg/kg		30.0	95	70-130			

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### Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit
<b>Batch 7031506 - SW846 3550B</b>										
<u>Blank (7031506-BLK1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Gasoline	BRL		mg/kg	13.3						
Fuel Oil #2	BRL		mg/kg	13.3						
Fuel Oil #4	BRL		mg/kg	13.3						
Fuel Oil #6	BRL		mg/kg	13.3						
Motor Oil	BRL		mg/kg	13.3						
Ligroin	BRL		mg/kg	13.3						
Aviation Fuel	BRL		mg/kg	13.3						
Unidentified	BRL		mg/kg	13.3						
Other Oil	BRL		mg/kg	13.3						
Total Petroleum Hydrocarbons	BRL		mg/kg	13.3						
Surrogate: 1-Chlorooctadecane	2.47		mg/kg		3.33		74	40-140		
<u>LCS (7031506-BS1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Fuel Oil #2	855		mg/kg	13.3	667		128	40-140		
<u>Duplicate (7031506-DUP1)      Source: SA59659-01</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Gasoline	BRL		mg/kg	38.0		BRL				50
Fuel Oil #2	BRL		mg/kg	38.0		BRL				50
Fuel Oil #4	BRL		mg/kg	38.0		BRL				50
Fuel Oil #6	BRL		mg/kg	38.0		BRL				50
Motor Oil	BRL		mg/kg	38.0		BRL				50
Ligroin	BRL		mg/kg	38.0		BRL				50
Aviation Fuel	BRL		mg/kg	38.0		BRL				50
Unidentified	BRL		mg/kg	38.0		BRL				50
Other Oil	BRL		mg/kg	38.0		BRL				50
Total Petroleum Hydrocarbons	BRL		mg/kg	38.0		BRL				50
Surrogate: 1-Chlorooctadecane	3.51		mg/kg		4.77		74	40-140		

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### Semivolatile Organic Compounds by GC - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit
<b>Batch 7031507 - SW846 3545A</b>										
<b><u>Blank (7031507-BLK1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
PCB 1016 BRL µg/kg 28.6										
PCB 1221 BRL µg/kg 28.6										
PCB 1232 BRL µg/kg 28.6										
PCB 1242 BRL µg/kg 28.6										
PCB 1248 BRL µg/kg 28.6										
PCB 1254 BRL µg/kg 28.6										
PCB 1260 BRL µg/kg 28.6										
PCB 1262 BRL µg/kg 28.6										
PCB 1268 BRL µg/kg 28.6										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	15.7		µg/kg		28.6		55	30-150		
Surrogate: Decachlorobiphenyl (Sr)	24.3		µg/kg		28.6		85	30-150		
<b><u>LCS (7031507-BS1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
PCB 1016 290 µg/kg 28.6 357 81 40-140										
PCB 1260 327 µg/kg 28.6 357 92 40-140										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) 14.3 µg/kg 28.6 50 30-150										
Surrogate: Decachlorobiphenyl (Sr) 22.9 µg/kg 28.6 80 30-150										
<b><u>LCS Dup (7031507-BSD1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
PCB 1016 291 µg/kg 28.6 357 82 40-140 1 30										
PCB 1260 337 µg/kg 28.6 357 94 40-140 2 30										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) 14.3 µg/kg 28.6 50 30-150										
Surrogate: Decachlorobiphenyl (Sr) 22.9 µg/kg 28.6 80 30-150										
<b><u>Duplicate (7031507-DUP1)</u></b> Source: SA59659-01										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
PCB 1016 BRL µg/kg 28.5 BRL 40										
PCB 1221 BRL µg/kg 28.5 BRL 40										
PCB 1232 BRL µg/kg 28.5 BRL 40										
PCB 1242 BRL µg/kg 28.5 BRL 40										
PCB 1248 BRL µg/kg 28.5 BRL 40										
PCB 1254 BRL µg/kg 28.5 BRL 40										
PCB 1260 BRL µg/kg 28.5 BRL 40										
PCB 1262 BRL µg/kg 28.5 BRL 40										
PCB 1268 BRL µg/kg 28.5 BRL 40										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	31.3		µg/kg		28.5		110	30-150		
Surrogate: Decachlorobiphenyl (Sr)	21.3		µg/kg		28.5		75	30-150		
<b>Batch 7040572 - SW846 3535</b>										
<b><u>Blank (7040572-BLK1)</u></b>										
Prepared & Analyzed: 10-Apr-07										
2,4,5-TP (Silvex) BRL µg/l 0.100										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) 0.0840 µg/l 0.200 42 30-150										
<b><u>LCS (7040572-BS1)</u></b>										
Prepared & Analyzed: 10-Apr-07										
2,4,5-TP (Silvex) 0.474 µg/l 0.100 0.500 95 40-140										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) 0.270 µg/l 0.200 135 30-150										
<b><u>LCS Dup (7040572-BSD1)</u></b>										
Prepared & Analyzed: 10-Apr-07										
2,4,5-TP (Silvex) 0.502 µg/l 0.100 0.500 100 40-140 5 25										
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) 0.289 µg/l 0.200 144 30-150										

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### Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031508 - SW846 3550B</b>										
<b>Blank (7031508-BLK1)</b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Acenaphthene	BRL		µg/kg	330						
Acenaphthylene	BRL		µg/kg	330						
Aniline	BRL		µg/kg	330						
Anthracene	BRL		µg/kg	330						
Atrazine	BRL		µg/kg	330						
Azobenzene/Diphenyldiazine	BRL		µg/kg	330						
Benzidine	BRL		µg/kg	330						
Benzo (a) anthracene	BRL		µg/kg	330						
Benzo (a) pyrene	BRL		µg/kg	330						
Benzo (b) fluoranthene	BRL		µg/kg	330						
Benzo (g,h,i) perylene	BRL		µg/kg	330						
Benzo (k) fluoranthene	BRL		µg/kg	330						
Benzoic acid	BRL		µg/kg	330						
Benzyl alcohol	BRL		µg/kg	330						
Bis(2-chloroethoxy)methane	BRL		µg/kg	330						
Bis(2-chloroethyl)ether	BRL		µg/kg	330						
Bis(2-chloroisopropyl)ether	BRL		µg/kg	330						
Bis(2-ethylhexyl)phthalate	BRL		µg/kg	330						
4-Bromophenyl phenyl ether	BRL		µg/kg	330						
Butyl benzyl phthalate	BRL		µg/kg	330						
Carbazole	BRL		µg/kg	330						
4-Chloro-3-methylphenol	BRL		µg/kg	330						
4-Chloroaniline	BRL		µg/kg	330						
2-Chloronaphthalene	BRL		µg/kg	330						
2-Chlorophenol	BRL		µg/kg	330						
4-Chlorophenyl phenyl ether	BRL		µg/kg	330						
Chrysene	BRL		µg/kg	330						
Dibenzo (a,h) anthracene	BRL		µg/kg	330						
Dibenzofuran	BRL		µg/kg	330						
1,2-Dichlorobenzene	BRL		µg/kg	330						
1,3-Dichlorobenzene	BRL		µg/kg	330						
1,4-Dichlorobenzene	BRL		µg/kg	330						
3,3'-Dichlorobenzidine	BRL		µg/kg	330						
2,4-Dichlorophenol	BRL		µg/kg	330						
Diethyl phthalate	BRL		µg/kg	330						
Dimethyl phthalate	BRL		µg/kg	330						
2,4-Dimethylphenol	BRL		µg/kg	330						
Di-n-butyl phthalate	BRL		µg/kg	330						
4,6-Dinitro-2-methylphenol	BRL		µg/kg	330						
2,4-Dinitrophenol	BRL		µg/kg	330						
2,4-Dinitrotoluene	BRL		µg/kg	330						
2,6-Dinitrotoluene	BRL		µg/kg	330						
Di-n-octyl phthalate	BRL		µg/kg	330						
Fluoranthene	BRL		µg/kg	330						
Fluorene	BRL		µg/kg	330						
Hexachlorobenzene	BRL		µg/kg	330						
Hexachlorobutadiene	BRL		µg/kg	330						
Hexachlorocyclopentadiene	BRL		µg/kg	330						
Hexachloroethane	BRL		µg/kg	330						
Indeno (1,2,3-cd) pyrene	BRL		µg/kg	330						
1-Methylnaphthalene	BRL		µg/kg	330						

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### Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031508 - SW846 3550B</b>										
<b><u>Blank (7031508-BLK1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Isophorone	BRL		µg/kg	330						
2-Methylnaphthalene	BRL		µg/kg	330						
2-Methylphenol	BRL		µg/kg	330						
3,4-Methylphenol	BRL		µg/kg	330						
Naphthalene	BRL		µg/kg	330						
2-Nitroaniline	BRL		µg/kg	330						
3-Nitroaniline	BRL		µg/kg	330						
4-Nitroaniline	BRL		µg/kg	1320						
Nitrobenzene	BRL		µg/kg	330						
2-Nitrophenol	BRL		µg/kg	330						
4-Nitrophenol	BRL		µg/kg	1320						
N-Nitrosodimethylamine	BRL		µg/kg	330						
N-Nitrosodi-n-propylamine	BRL		µg/kg	330						
N-Nitrosodiphenylamine	BRL		µg/kg	330						
Pentachlorophenol	BRL		µg/kg	330						
Phenanthrene	BRL		µg/kg	330						
Phenol	BRL		µg/kg	330						
Pyrene	BRL		µg/kg	330						
Pyridine	BRL		µg/kg	330						
1,2,4-Trichlorobenzene	BRL		µg/kg	330						
2,4,5-Trichlorophenol	BRL		µg/kg	330						
2,4,6-Trichlorophenol	BRL		µg/kg	330						
Surrogate: 2-Fluorobiphenyl	5470		µg/kg		6670		82	30-130		
Surrogate: 2-Fluorophenol	4340		µg/kg		6670		65	15-110		
Surrogate: Nitrobenzene-d5	5180		µg/kg		6670		78	30-130		
Surrogate: Phenol-d5	4360		µg/kg		6670		65	15-110		
Surrogate: Terphenyl-d4	6310		µg/kg		6670		95	30-130		
Surrogate: 2,4,6-Tribromophenol	5740		µg/kg		6670		86	15-110		
<b><u>LCS (7031508-BS1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Acenaphthene	5100		µg/kg	330	6670		76	40-130		
Acenaphthylene	4730		µg/kg	330	6670		71	40-130		
Aniline	3380		µg/kg	330	6670		51	40-130		
Anthracene	5690		µg/kg	330	6670		85	40-130		
Atrazine	6050		µg/kg	330	6670		91	40-130		
Azobenzene/Diphenyldiazine	4220		µg/kg	330	6670		63	40-130		
Benzidine	3260		µg/kg	330	6670		49	0-130		
Benzo (a) anthracene	4480		µg/kg	330	6670		67	40-130		
Benzo (a) pyrene	5290		µg/kg	330	6670		79	40-130		
Benzo (b) fluoranthene	4680		µg/kg	330	6670		70	40-130		
Benzo (g,h,i) perylene	3440		µg/kg	330	6670		52	40-130		
Benzo (k) fluoranthene	6550		µg/kg	330	6670		98	40-130		
Benzoic acid	2940		µg/kg	330	6670		44	0-130		
Benzyl alcohol	3350		µg/kg	330	6670		50	40-130		
Bis(2-chloroethoxy)methane	3110		µg/kg	330	6670		47	40-130		
Bis(2-chloroethyl)ether	4040		µg/kg	330	6670		61	40-130		
Bis(2-chloroisopropyl)ether	3340		µg/kg	330	6670		50	40-130		
Bis(2-ethylhexyl)phthalate	4490		µg/kg	330	6670		67	40-130		
4-Bromophenyl phenyl ether	5010		µg/kg	330	6670		75	40-130		
Butyl benzyl phthalate	4520		µg/kg	330	6670		68	40-130		
Carbazole	7970		µg/kg	330	6670		119	40-130		

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### Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031508 - SW846 3550B</b>										
<u>LCS (7031508-BS1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
4-Chloro-3-methylphenol	3000		µg/kg	330	6670		45	40-130		
4-Chloroaniline	3070		µg/kg	330	6670		46	40-130		
2-Chloronaphthalene	5030		µg/kg	330	6670		75	40-130		
2-Chlorophenol	3820		µg/kg	330	6670		57	40-130		
4-Chlorophenyl phenyl ether	5570		µg/kg	330	6670		84	40-130		
Chrysene	5630		µg/kg	330	6670		84	40-130		
Dibenzo (a,h) anthracene	3630		µg/kg	330	6670		54	40-130		
Dibenzofuran	5080		µg/kg	330	6670		76	40-130		
1,2-Dichlorobenzene	5080		µg/kg	330	6670		76	40-130		
1,3-Dichlorobenzene	3430		µg/kg	330	6670		51	40-130		
1,4-Dichlorobenzene	5440		µg/kg	330	6670		82	40-130		
3,3'-Dichlorobenzidine	5800		µg/kg	330	6670		87	40-130		
2,4-Dichlorophenol	3090		µg/kg	330	6670		46	40-130		
Diethyl phthalate	4500		µg/kg	330	6670		67	40-130		
Dimethyl phthalate	4520		µg/kg	330	6670		68	40-130		
2,4-Dimethylphenol	2990		µg/kg	330	6670		45	40-130		
Di-n-butyl phthalate	4610		µg/kg	330	6670		69	40-130		
4,6-Dinitro-2-methylphenol	2800		µg/kg	330	6670		42	40-130		
2,4-Dinitrophenol	2750		µg/kg	330	6670		41	40-130		
2,4-Dinitrotoluene	4300		µg/kg	330	6670		64	40-130		
2,6-Dinitrotoluene	5390		µg/kg	330	6670		81	40-130		
Di-n-octyl phthalate	5880		µg/kg	330	6670		88	40-130		
Fluoranthene	4590		µg/kg	330	6670		69	40-130		
Fluorene	4610		µg/kg	330	6670		69	40-130		
Hexachlorobenzene	5300		µg/kg	330	6670		79	40-130		
Hexachlorobutadiene	4480		µg/kg	330	6670		67	40-130		
Hexachlorocyclopentadiene	2670		µg/kg	330	6670		40	40-130		
Hexachloroethane	3930		µg/kg	330	6670		59	40-130		
Indeno (1,2,3-cd) pyrene	3490		µg/kg	330	6670		52	40-130		
Isophorone	3460		µg/kg	330	6670		52	40-130		
1-Methylnaphthalene	5570		µg/kg	330	6670		84	40-140		
2-Methylnaphthalene	4020		µg/kg	330	6670		60	40-130		
2-Methylphenol	3950		µg/kg	330	6670		59	40-130		
3,4-Methylphenol	3880		µg/kg	330	6670		58	40-130		
Naphthalene	3660		µg/kg	330	6670		55	40-130		
2-Nitroaniline	4580		µg/kg	330	6670		69	40-130		
3-Nitroaniline	5240		µg/kg	330	6670		79	40-130		
4-Nitroaniline	4870		µg/kg	1320	6670		73	40-130		
Nitrobenzene	4060		µg/kg	330	6670		61	40-130		
2-Nitrophenol	3310		µg/kg	330	6670		50	40-130		
4-Nitrophenol	3730		µg/kg	1320	6670		56	40-130		
N-Nitrosodimethylamine	4340		µg/kg	330	6670		65	40-130		
N-Nitrosodi-n-propylamine	3510		µg/kg	330	6670		53	40-130		
N-Nitrosodiphenylamine	5120		µg/kg	330	6670		77	40-130		
Pentachlorophenol	4510		µg/kg	330	6670		68	40-130		
Phenanthrene	4230		µg/kg	330	6670		63	40-130		
Phenol	3640		µg/kg	330	6670		55	40-130		
Pyrene	4980		µg/kg	330	6670		75	40-130		
Pyridine	4220		µg/kg	330	6670		63	40-130		
1,2,4-Trichlorobenzene	4000		µg/kg	330	6670		60	40-130		
2,4,5-Trichlorophenol	4540		µg/kg	330	6670		68	40-130		

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### Semivolatile Organic Compounds by GCMS - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031508 - SW846 3550B</b>										
<u>LCS (7031508-BS1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
2,4,6-Trichlorophenol	3250		µg/kg	330	6670		49	40-130		
Surrogate: 2-Fluorobiphenyl	5850		µg/kg		6670		88	30-130		
Surrogate: 2-Fluorophenol	4020		µg/kg		6670		60	15-110		
Surrogate: Nitrobenzene-d5	4040		µg/kg		6670		61	30-130		
Surrogate: Phenol-d5	3300		µg/kg		6670		49	15-110		
Surrogate: Terphenyl-d14	6180		µg/kg		6670		93	30-130		
Surrogate: 2,4,6-Tribromophenol	5900		µg/kg		6670		88	15-110		

### Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031479 - EPA200/SW7000 Series</b>										
<u>Blank (7031479-BLK1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Mercury	BRL		mg/kg		0.0296					
<u>Duplicate (7031479-DUP1)</u>	<u>Source: SA59659-01</u>									
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Mercury	0.0240	J	mg/kg		0.0292		0.0229		5	20
<u>Matrix Spike (7031479-MS1)</u>	<u>Source: SA59659-02</u>									
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Mercury	0.389		mg/kg		0.0293	0.407	0.0351	87	75-125	
<u>Post Spike (7031479-PS1)</u>	<u>Source: SA59659-02</u>									
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Mercury	0.389		mg/kg		0.0295	0.410	0.0351	86	85-115	
<u>Reference (7031479-SRM1)</u>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Mercury	1.21		mg/kg		0.0300	1.13		107	65.9-132.6	

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### Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit
<b>Batch 7031478 - EPA 200 Series</b>										
<b><u>Blank (7031478-BLK1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Lead BRL mg/kg 0.730										
Arsenic BRL mg/kg 1.46										
Chromium BRL mg/kg 0.486										
Cadmium BRL mg/kg 0.243										
<b><u>Duplicate (7031478-DUP1)</u></b> Source: SA59659-01										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Chromium 4.90 mg/kg 0.472						BRL				35
Cadmium 0.189 J,QR4 mg/kg 0.236						0.0683				94
Lead 8.46 QR5 mg/kg 0.708						1.37				144
Arsenic 8.02 mg/kg 1.42						BRL				35
<b><u>Matrix Spike (7031478-MS1)</u></b> Source: SA59659-02										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Cadmium 105 mg/kg 0.221					110	0.0390	95	70-130		
Lead 109 mg/kg 0.662					110	0.650	98	70-130		
Arsenic 113 mg/kg 1.32					110	BRL	103	70-130		
Chromium 106 mg/kg 0.441					110	BRL	96	70-130		
<b><u>Post Spike (7031478-PS1)</u></b> Source: SA59659-02										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Cadmium 107 mg/kg 0.238					119	0.0390	90	85-115		
Lead 102 mg/kg 0.714					119	0.650	85	85-115		
Chromium 112 mg/kg 0.476					119	BRL	94	85-115		
Arsenic 116 mg/kg 1.43					119	BRL	97	85-115		
<b><u>Reference (7031478-SRM1)</u></b>										
Prepared: 26-Mar-07 Analyzed: 27-Mar-07										
Lead 44.2 mg/kg 0.750					45.0		98	81.8-118.1		
Chromium 47.3 mg/kg 0.500					49.6		95	78.9-120.5		
Arsenic 43.0 mg/kg 1.50					45.0		96	80.8-119.4		
Cadmium 31.8 mg/kg 0.250					31.9		100	82.1-117.9		

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\* Reportable Detection Limit

BRL = Below Reporting Limit

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**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7031541 - SW846 3010A</b>										
<u><b>Blank (7031541-BLK1)</b></u>										
Prepared & Analyzed: 26-Mar-07										
Chromium	BRL		mg/l	0.0050						
<u><b>LCS (7031541-BS1)</b></u>										
Prepared & Analyzed: 26-Mar-07										
Chromium	1.23		mg/l	0.0050	1.25		98	80.7-110		
<u><b>LCS Dup (7031541-BSD1)</b></u>										
Prepared & Analyzed: 26-Mar-07										
Chromium	1.18		mg/l	0.0050	1.25		94	80.7-110	4	20
<u><b>Duplicate (7031541-DUP1)</b></u> Source: SA59642-01										
Prepared & Analyzed: 26-Mar-07										
Chromium	0.0036	J	mg/l	0.0050		0.0033			9	20
<u><b>Matrix Spike (7031541-MS1)</b></u> Source: SA59629-10										
Prepared & Analyzed: 26-Mar-07										
Chromium	1.15		mg/l	0.0050	1.25	0.0034	92	76.7-115		
<u><b>Matrix Spike Dup (7031541-MSD1)</b></u> Source: SA59629-10										
Prepared & Analyzed: 26-Mar-07										
Chromium	1.13		mg/l	0.0050	1.25	0.0034	90	76.7-115	2	20
<u><b>Post Spike (7031541-PS1)</b></u> Source: SA59629-10										
Prepared & Analyzed: 26-Mar-07										
Chromium	1.14		mg/l	0.0050	1.25	0.0034	91	81.8-109		
<b>Batch 7040588 - SW846 3010A</b>										
<u><b>Blank (7040588-BLK1)</b></u>										
Prepared & Analyzed: 10-Apr-07										
Vanadium	BRL		mg/l	0.0050						
Selenium	BRL		mg/l	0.0150						
Lead	BRL		mg/l	0.0075						
Zinc	0.0064	QB1	mg/l	0.0050						
Antimony	BRL		mg/l	0.0120						
Thallium	BRL		mg/l	0.0050						
Nickel	BRL		mg/l	0.0050						
Cadmium	BRL		mg/l	0.0025						
Arsenic	BRL		mg/l	0.0150						
Silver	BRL		mg/l	0.0100						
Barium	BRL		mg/l	0.0100						
Beryllium	BRL		mg/l	0.0040						
Copper	BRL		mg/l	0.0050						
Chromium	BRL		mg/l	0.0050						
<u><b>LCS (7040588-BS1)</b></u>										
Prepared & Analyzed: 10-Apr-07										
Vanadium	1.15		mg/l	0.0050	1.25		92	85-115		
Lead	1.13		mg/l	0.0075	1.25		90	74.1-104		
Antimony	1.16		mg/l	0.0060	1.25		93	79.1-100		
Nickel	1.17		mg/l	0.0050	1.25		94	79.3-102		
Zinc	1.40		mg/l	0.0050	1.25		112	85.3-113		
Selenium	1.30		mg/l	0.0150	1.25		104	78.9-116		
Thallium	1.03		mg/l	0.0050	1.25		82	79-109		
Chromium	1.17		mg/l	0.0050	1.25		94	82-107		
Silver	1.15		mg/l	0.0100	1.25		92	69.2-113		

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**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7040588 - SW846 3010A</b>										
<b>LCS (7040588-BS1)</b>										
Prepared & Analyzed: 10-Apr-07										
Copper	1.40		mg/l	0.0050	1.25		112	95.2-117		
Cadmium	1.24		mg/l	0.0025	1.25		99	81.6-115		
Barium	1.27		mg/l	0.0100	1.25		102	86-117		
Arsenic	1.25		mg/l	0.0150	1.25		100	82.5-110		
Beryllium	1.20		mg/l	0.0040	1.25		96	89.8-100		
<b>LCS Dup (7040588-BSD1)</b>										
Prepared & Analyzed: 10-Apr-07										
Nickel	1.17		mg/l	0.0050	1.25		94	79.3-102	0	20
Antimony	1.16		mg/l	0.0060	1.25		93	79.1-100	0	20
Zinc	1.37		mg/l	0.0050	1.25		110	85.3-113	2	20
Thallium	1.02		mg/l	0.0050	1.25		82	79-109	1	20
Vanadium	1.14		mg/l	0.0050	1.25		91	85-115	0.9	20
Selenium	1.32		mg/l	0.0150	1.25		106	78.9-116	2	20
Lead	1.12		mg/l	0.0075	1.25		90	74.1-104	0.9	20
Chromium	1.16		mg/l	0.0050	1.25		93	82-107	0.9	20
Barium	1.26		mg/l	0.0100	1.25		101	86-117	0.8	20
Cadmium	1.24		mg/l	0.0025	1.25		99	81.6-115	0	20
Silver	1.14		mg/l	0.0100	1.25		91	69.2-113	0.9	20
Arsenic	1.26		mg/l	0.0150	1.25		101	82.5-110	0.8	20
Beryllium	1.19		mg/l	0.0040	1.25		95	89.8-100	0.8	20
Copper	1.40		mg/l	0.0050	1.25		112	95.2-117	0	20
<b>Duplicate (7040588-DUP1)</b>		Source: SA60338-01								
Prepared & Analyzed: 10-Apr-07										
Antimony	0.0376		mg/l	0.0060		0.0330			13	20
Thallium	BRL		mg/l	0.0050		BRL				20
Lead	0.0168		mg/l	0.0075		0.0168			0	20
Selenium	0.0078	J	mg/l	0.0150		0.0080			3	20
Vanadium	0.0014	J	mg/l	0.0050		0.0012			15	20
Nickel	0.0626	QR6	mg/l	0.0050		0.0492			24	20
Zinc	17.2		mg/l	0.0050		17.7			3	20
Chromium	0.0338	QR1	mg/l	0.0050		0.0224			41	20
Copper	0.144	QR6	mg/l	0.0050		0.100			36	20
Arsenic	BRL		mg/l	0.0150		BRL				20
Silver	BRL		mg/l	0.0100		BRL				20
Cadmium	0.0024	J	mg/l	0.0025		0.0028			15	20
Beryllium	BRL		mg/l	0.0040		0.0004				20
Barium	0.105		mg/l	0.0100		0.0919			13	20
<b>Matrix Spike (7040588-MS1)</b>		Source: SA60145-01								
Prepared & Analyzed: 10-Apr-07										
Selenium	1.25		mg/l	0.0150	1.25	0.0076	99	79.9-113		
Antimony	1.14		mg/l	0.0060	1.25	0.0088	90	0-200		
Nickel	1.18		mg/l	0.0050	1.25	0.0510	90	54.4-116		
Lead	1.10		mg/l	0.0075	1.25	0.0023	88	68.9-106		
Thallium	0.992		mg/l	0.0050	1.25	BRL	79	75-125		
Vanadium	1.12		mg/l	0.0050	1.25	BRL	90	75-125		
Zinc	1.54		mg/l	0.0050	1.25	0.186	108	64.9-124		
Copper	1.38		mg/l	0.0050	1.25	BRL	110	93.9-115		
Barium	1.49		mg/l	0.0100	1.25	0.227	101	84.5-116		
Beryllium	1.18		mg/l	0.0040	1.25	BRL	94	72.4-111		
Silver	1.10		mg/l	0.0100	1.25	BRL	88	70.4-112		

*This laboratory report is not valid without an authorized signature on the cover page.*

**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 7040588 - SW846 3010A</b>										
<b>Matrix Spike (7040588-MS1)      Source: SA60145-01</b>										
Prepared & Analyzed: 10-Apr-07										
Chromium                                  1.12 mg/l 0.0050 1.25 0.0027 89 81-103										
Cadmium                                  1.17 mg/l 0.0025 1.25 BRL 94 63.8-121										
Arsenic                                  1.22 mg/l 0.0150 1.25 BRL 98 82.9-109										
<b>Matrix Spike Dup (7040588-MSD1) Source: SA60145-01</b>										
Prepared & Analyzed: 10-Apr-07										
Vanadium	1.12	mg/l	0.0050	1.25	BRL	90	75-125	0	20	
Nickel	1.20	mg/l	0.0050	1.25	0.0510	92	54.4-116	2	20	
Thallium	1.01	mg/l	0.0050	1.25	BRL	81	75-125	2	20	
Lead	1.11	mg/l	0.0075	1.25	0.0023	89	68.9-106	0.9	20	
Selenium	1.28	mg/l	0.0150	1.25	0.0076	102	79.9-113	2	20	
Antimony	1.16	mg/l	0.0060	1.25	0.0088	92	0-200	2	20	
Zinc	1.56	mg/l	0.0050	1.25	0.186	110	64.9-124	1	20	
Silver	1.13	mg/l	0.0100	1.25	BRL	90	70.4-112	3	20	
Copper	1.39	mg/l	0.0050	1.25	BRL	111	93.9-115	0.7	20	
Beryllium	1.19	mg/l	0.0040	1.25	BRL	95	72.4-111	0.8	20	
Chromium	1.13	mg/l	0.0050	1.25	0.0027	90	81-103	0.9	20	
Barium	1.50	mg/l	0.0100	1.25	0.227	102	84.5-116	0.7	20	
Arsenic	1.25	mg/l	0.0150	1.25	BRL	100	82.9-109	2	20	
Cadmium	1.19	mg/l	0.0025	1.25	BRL	95	63.8-121	2	20	
<b>Post Spike (7040588-PS1)      Source: SA60145-01</b>										
Prepared & Analyzed: 10-Apr-07										
Nickel	1.17	mg/l	0.0050	1.25	0.0510	90	65.7-108			
Antimony	1.06	mg/l	0.0060	1.25	0.0088	84	45.7-109			
Zinc	1.54	mg/l	0.0050	1.25	0.186	108	73.8-120			
Thallium	1.00	mg/l	0.0050	1.25	BRL	80	80-120			
Vanadium	1.12	mg/l	0.0050	1.25	BRL	90	80-120			
Selenium	1.26	mg/l	0.0150	1.25	0.0076	100	80.7-114			
Lead	1.08	mg/l	0.0075	1.25	0.0023	86	69.1-106			
Chromium	1.12	mg/l	0.0050	1.25	0.0027	89	79.2-107			
Copper	1.38	mg/l	0.0050	1.25	BRL	110	96.5-113			
Cadmium	1.16	mg/l	0.0025	1.25	BRL	93	70.9-117			
Beryllium	1.17	mg/l	0.0040	1.25	BRL	94	94-94			
Arsenic	1.22	mg/l	0.0150	1.25	BRL	98	72.8-117			
Barium	1.49	mg/l	0.0100	1.25	0.227	101	84.7-117			
Silver	1.14	mg/l	0.0100	1.25	BRL	91	67.7-120			
<b>Batch 7040589 - EPA200/SW7000 Series</b>										
<b>Blank (7040589-BLK1)</b>										
Prepared: 10-Apr-07 Analyzed: 11-Apr-07										
Mercury	BRL	mg/l	0.00040							
<b>LCS (7040589-BS1)</b>										
Prepared: 10-Apr-07 Analyzed: 11-Apr-07										
Mercury	0.00224	mg/l	0.00040	0.00250		90	63.3-124			
<b>Duplicate (7040589-DUP1)      Source: SA60338-01</b>										
Prepared: 10-Apr-07 Analyzed: 11-Apr-07										
Mercury	BRL	mg/l	0.00040		BRL					20
<b>Matrix Spike (7040589-MS1)      Source: SA60145-01</b>										
Prepared: 10-Apr-07 Analyzed: 11-Apr-07										
Mercury	0.00233	mg/l	0.00040	0.00250	BRL	93	53.1-126			

*This laboratory report is not valid without an authorized signature on the cover page.*

**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch 7040589 - EPA200/SW7000 Series**

**Matrix Spike Dup (7040589-MSD1) Source: SA60145-01**

Prepared: 10-Apr-07 Analyzed: 11-Apr-07

Mercury	0.00229	mg/l	0.00040	0.00250	BRL	92	53.1-126	2	20
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**Post Spike (7040589-PS1) Source: SA60145-01**

Prepared: 10-Apr-07 Analyzed: 11-Apr-07

Mercury	0.00219	mg/l	0.00040	0.00250	BRL	88	85-115		
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**General Chemistry Parameters - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch 7031468 - General Preparation**

**Duplicate (7031468-DUP1) Source: SA59659-01**

Prepared & Analyzed: 24-Mar-07

% Solids	21.6	%			21.1		2	200	
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**Batch 7031625 - General Preparation**

**LCS (7031625-BS1)**

Prepared & Analyzed: 27-Mar-07

Specific Conductance (EC)	147	uS/cm		147		100	95-105		
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**Duplicate (7031625-DUP1) Source: SA59659-06**

Prepared & Analyzed: 27-Mar-07

Specific Conductance (EC)	17.6	uS/cm			17.4		1	5	
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**Reference (7031625-SRM1)**

Prepared & Analyzed: 27-Mar-07

Specific Conductance (EC)	211	uS/cm		200		106	80-120		
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## Notes and Definitions

Comp Completed

QB1 The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.

QR1 Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.

QR4 Analyses are not controlled on RPD values from sample concentrations less than the reporting limit. QC batch accepted based on LCS and/or LCSD QC results

QR5 RPD out of acceptance range.

QR6 The RPD exceeded the QC control limits; however precision is demonstrated with acceptable RPD values for MS/MSD.

vex2 Field extracted

BRL Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

### Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.

Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel

Fuel Oil #4 - includes #4 fuel oil

Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil

Motor Oil - includes virgin and waste automobile oil

Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha

Aviation Fuel - includes kerosene, Jet A and JP-4

Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as \*TPH (Calculated as).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

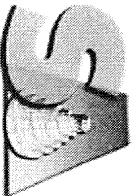
Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Validated by:  
Hanibal C. Tayeh, Ph.D.  
Nicole Brown



SPRINGFIELD, MASS.

## CHAIN OF CUSTODY RECORD

*Headquarters:* 11 Almgren Drive & 830 Silver Street • Agawam, MA 01001 • 1-800-789-9115 • 413-789-9018 • FAX 413-789-4076  
*FL Division:* 8180 Woodland Center Boulevard • Tampa, FL 33614 • 1-888-497-5270 • 813-888-9507 • FAX 800-480-6435

Pesticides

Chlordane	0.066
2,4, D	1.4
Heptachlor epoxide	0.02
Heptachlor	0.013
Lindane	0.02
Methoxychlor	0.8
Toxaphene	0.33

Inorganic Substances

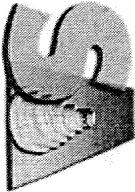
✓ Antimony	0.006
✗ Arsenic	0.05
— Barium	1
✓ Beryllium	0.004
✗ Cadmium	0.005
✗ Chromium, total	0.05
✓ Copper	1.3
✗ Lead	0.015
✗ Mercury	0.002
✓ Nickel	0.1
✗ Selenium	0.05
✗ Silver	0.036
✓ Thallium	0.005
Vanadium	0.05
✗ Zinc	5

SDWA Pesticides  
Substance

2,4,5,-TP (Silvex)  
Endrin

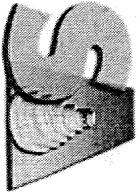
SDWA Standards  
(mg/L)

0.05  
0.002



THE JOURNAL OF

## CHAIN OF CUSTODY RECORD

CHAIN OF CUSTODY RECORD									
 <b>SPECTRUM ANALYTICAL, INC.</b> Framingham HOME TECHNOLOGY					Project No.: _____ Page <u>1</u> of <u>1</u> Site Name: <u>Lowell Reg. Under Utility</u> Location: <u>Lowell</u> State: <u>MA</u> Sampler(s): <u>Mark Meloia's</u> Special Handling: <input type="checkbox"/> Standard TAT - 7 to 10 business days <input checked="" type="checkbox"/> Rush TAT - Date Needed <u>3/27/07</u> <input type="checkbox"/> All TAT is subject to laboratory approval. Samples disposed of after 60 days unless otherwise instructed.				
Report To: <u>New England Diesel Tech.</u>		Invoice To: <u>SYNTE</u>		P.O. No.: <u>4</u>		Project Mgr: <u>M. R. Bechtson</u>			
<u>1 Blue St.</u>		<u>Stowberry MA 01745</u>							
DW=Drinking Water		GW=Groundwater		WW=Wastewater					
O=Oil		SW=Surface Water		SO=Soil		SL=Sludge		A=Air	
X1=		X2=		X3=					
G=Grab C=Composite Lab Id: Sample Id: Date: Time: Type Matrix Preservative Containers: Analyses: QA Reporting Notes: (check if needed)									
<u>51654-01</u> <u>5/w-1</u> <u>3/23/07</u> <u>12:40pm</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>Plastic Bag</u> <u>Total VOCs (8020)</u> <input checked="" type="checkbox"/> <u>02</u> <u>N/w-1</u> <u>3/23/07</u> <u>12:30</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>Total PCBs</u> <input checked="" type="checkbox"/> <u>03</u> <u>5-1</u> <u>3/23/07</u> <u>12:30</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>TCLP Chromium</u> <input checked="" type="checkbox"/> <u>04</u> <u>N-1</u> <u>3/23/07</u> <u>12:40</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>TPH by GC (8100)</u> <input checked="" type="checkbox"/> <u>05</u> <u>5/E-1</u> <u>3/23/07</u> <u>12:50</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>PCB<sup>152</sup></u> <input checked="" type="checkbox"/> <u>06</u> <u>N/E-1</u> <u>3/23/07</u> <u>1:00</u> <u>C</u> <u>SL</u> <u>7/9/2</u> <u>-</u> <u>Total SVOCs (8020)</u> <input checked="" type="checkbox"/> <u>07</u> <u>Composite of all 5/22</u> <u>-</u> <u>C</u> <u>SL</u> <u>-</u> <u>Conductivity</u> <input checked="" type="checkbox"/> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>TCLP 8151-8020</u> <input checked="" type="checkbox"/> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>QA/QC Reporting Level</u> <input type="checkbox"/> <u>Provide MA DEP MCP CAM Report</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>Standard</u> <input type="checkbox"/> <u>No QC</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>Other</u> <input type="checkbox"/> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>Same specific reporting standards:</u> <input type="checkbox"/> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>07 created from</u> <input checked="" type="checkbox"/> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>per attached checklist</u> <input checked="" type="checkbox"/>									
Relinquished by: <u>Mark Meloia</u> Received by: <u>J. M.</u> Date: <u>3/23/07</u> Time: <u>10:45AM</u> E-mail to <u>mark.meloia@newenglandtech.com</u> EDD Format <u>(35)</u> Condition upon receipt: <input type="checkbox"/> Iced <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> C <u>(35)</u>									
Fax results when available to <u>(508) 732-1933</u> 									

11 Attinger Drive • Agawam, Massachusetts 01001 • 413.789.9018 • Fax 413.789.4076 • [www.spectrum-analytical.com](http://www.spectrum-analytical.com)

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## **APPENDIX C: WOODARD & CURRAN LABORATORY DATA**



### Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
Tel. (860) 645-1102 Fax (860) 645-0823

## Analysis Report

October 17, 2006

FOR: Attn: Mr. Peter Malloy  
EAS Laboratories  
105 Commercial Street  
Watertown, CT 06795

### Sample Information

Matrix: SOIL  
Location Code: EASLABS  
Rush Request: RUSH  
P.O.#:

### Custody Information

Collected by:  
Received by: LB  
Analyzed by: see "By" below

Date

Time

09/26/06

15:00

10/02/06

17:00

## Laboratory Data

SDG I.D.: GAH56514

Phoenix I.D.: AH56514

Client ID: WOODARD & CURRAN RESIDUALS LAGOON #1

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Beryllium	< 0.001	0.001	mg/L	10/03/06		TH	E1312/SW6010
SPLP Copper	0.01	0.01	mg/L	10/03/06		TH	E1312/SW6010
SPLP Nickel	< 0.01	0.01	mg/L	10/03/06		TH	E1312/SW6010
SPLP Antimony	< 0.005	0.005	mg/L	10/03/06		TH	E1312/SW6010
SPLP Thallium	< 0.005	0.005	mg/L	10/03/06		TH	E1312/SW6010
SPLP Vanadium	< 0.01	0.01	mg/L	10/03/06		TH	E1312/SW6010
SPLP Zinc	< 0.01	0.01	mg/L	10/03/06		TH	E1312/SW6010
TCLP Silver	< 0.01	0.01	mg/L	10/03/06		TH	E1311/SW6010
TCLP Arsenic	< 0.01	0.01	mg/L	10/03/06		TH	E1311/SW6010
TCLP Barium	0.12	0.01	mg/L	10/03/06		TH	E1311/SW6010
TCLP Cadmium	< 0.005	0.005	mg/L	10/03/06		TH	E1311/SW6010
TCLP Chromium	< 0.01	0.01	mg/L	10/03/06		TH	E1311/SW6010
TCLP Lead	< 0.015	0.015	mg/L	10/03/06		TH	SW1311/6010
TCLP Selenium	< 0.05	0.05	mg/L	10/03/06		TH	E1311/SW6010
TCLP Mercury	< 0.001	0.001	mg/L	10/03/06		RS	E1311/E245.1
Percent Solid	11		%	10/03/06		C/D	E160.3
Corrosivity	Negative	NONE	None	10/02/06		CD	S423/E150.1
pH	6.17	0.10	pH Units	10/02/06	23:00	CD	E150.1/SW9045
Paint Filter Test	Passed		Pass / Fail	10/03/06		DM	SW846 9095
SPLP Herbicides Extraction	Completed			10/03/06		O/E	SW 3510/3520
SPLP Extraction for Metals	Completed			10/02/06		D	EPA 1312
SPLP Extraction for Organics	Completed			10/02/06		D	EPA1312
SPLP Pesticides Extraction	Completed			10/05/06		O/K	SW3510/3520
SPLP Semi-Volatile Extraction	Completed			10/03/06		O/K	SW 3510/3520

Client ID: WOODARD &amp; CURRAN RESIDUALS LAGOON #1

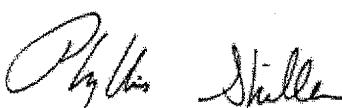
Phoenix I.D.: AH56514

Parameter	Result	RL	Units	Date	Time	By	Reference
SPLP Extraction for Volatiles	Completed			10/10/06		D	EPA 1312
TCLP Digestion Mercury	Completed			10/03/06		D	E1311/7470
TCLP Extraction for Metals	Completed			10/02/06		D	EPA 1311
SPLP Metals Digestion	Completed			10/03/06		D	SW846-3005
TCLP Metals Digestion	Completed			10/03/06		D	SW846 - 3005
<b><u>SPLP Herbicides</u></b>							
2,4,5-TP (Silvex)	ND	1.0	ug/L	10/05/06		JRB	SW8151
2,4-D	ND	5.0	ug/L	10/05/06		JRB	SW8151
<b><u>SPLP Pesticides</u></b>							
4,4'-DDD	ND	0.1	ug/L	10/08/06		MH	SW 8081
4,4'-DDE	ND	0.1	ug/L	10/08/06		MH	SW 8081
4,4'-DDT	ND	0.1	ug/L	10/08/06		MH	SW 8081
a-BHC	ND	0.05	ug/L	10/08/06		MH	SW 8081
Alachlor	ND	0.05	ug/L	10/08/06		MH	SW 8081
Aldrin	ND	0.05	ug/L	10/08/06		MH	SW 8081
b-BHC	ND	0.05	ug/L	10/08/06		MH	SW 8081
Chlordane	ND	0.3	ug/L	10/08/06		MH	SW 8081
d-BHC	ND	0.05	ug/L	10/08/06		MH	SW 8081
Dieldrin	ND	0.1	ug/L	10/08/06		MH	SW 8081
Endosulfan I	ND	0.05	ug/L	10/08/06		MH	SW 8081
Endosulfan II	ND	0.1	ug/L	10/08/06		MH	SW 8081
Endosulfan Sulfate	ND	0.1	ug/L	10/08/06		MH	SW 8081
Endrin	ND	0.1	ug/L	10/08/06		MH	SW 8081
Endrin Aldehyde	ND	0.1	ug/L	10/08/06		MH	SW 8081
g-BHC (Lindane)	ND	0.05	ug/L	10/08/06		MH	SW 8081
Heptachlor	ND	0.05	ug/L	10/08/06		MH	SW 8081
Heptachlor epoxide	ND	0.05	ug/L	10/08/06		MH	SW 8081
Methoxychlor	ND	0.2	ug/L	10/08/06		MH	SW 8081
Toxaphene	ND	1.0	ug/L	10/08/06		MH	SW 8081
<b><u>QA/QC Surrogates</u></b>							
%DCBP (Surrogate Rec)	71		%	10/08/06		MH	SW 8081
%TCMX (Surrogate Rec)	112		%	10/08/06		MH	SW 8081
<b><u>SPLP Volatiles</u></b>							
1,1-Dichloroethylene	ND	50	ug/L	10/12/06		R/J	SW 8260
1,2-Dichloroethane	ND	20	ug/L	10/12/06		R/J	SW 8260
Benzene	ND	20	ug/L	10/12/06		R/J	SW 8260
Carbon tetrachloride	ND	50	ug/L	10/12/06		R/J	SW 8260
Chlorobenzene	ND	50	ug/L	10/12/06		R/J	SW 8260
Chloroform	ND	50	ug/L	10/12/06		R/J	SW 8260
Methyl ethyl ketone	ND	50	ug/L	10/12/06		R/J	SW 8260
Tetrachloroethene	ND	50	ug/L	10/12/06		R/J	SW 8260
Trichloroethene	ND	50	ug/L	10/12/06		R/J	SW 8260

Client ID: WOODARD & CURRAN RESIDUALS LAGOON #1					Phoenix I.D.: AH56514			
Parameter	Result	RL	Units	Date	Time	By	Reference	
Vinyl chloride	ND	50	ug/L	10/12/06		R/J	SW 8260	
<b>QA/QC Surrogates</b>								
%4-Bromofluorobenzene (Surrogate)	102		%	10/12/06		R/J	SW 8260	

**Comments:** ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.



Phyllis Shiller, Laboratory Director  
October 17, 2006

**ALPHA ANALYTICAL LABORATORIES**  
**CERTIFICATE OF ANALYSIS**

MA:M-MA086 NH:200301-A CT:PH-0574 ME:MA086 RI:65 NY:11148 NJ:MA935 Army:USACE

Laboratory Sample Number: L0501427-01

Date Collected: 09-FEB-2005 15:30

SL-01

Date Received : 10-FEB-2005

Sample Matrix: SLUDGE

Date Reported : 17-FEB-2005

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 3-Amber

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE	ID
					PREP	ANAL
pH	6.3	SU	-	1 9045C	0211	19:15 DP
Paint Filter Liquid	POSITIVE	-	0	1 9095A	0217	11:05 AT
TCLP Metals						
TCLP Extraction				1 1311	0215	16:45
Aluminum, TCLP	2.5	mg/l	1.0	1 6010B	0216	18:30 0217 11:06 MG
Arsenic, TCLP	ND	mg/l	1.0	1 6010B	0216	18:30 0217 11:06 MG
Barium, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Beryllium, TCLP	ND	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Cadmium, TCLP	ND	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Chromium, TCLP	ND	mg/l	0.20	1 6010B	0216	18:30 0217 11:06 MG
Copper, TCLP	ND	mg/l	0.20	1 6010B	0216	18:30 0217 11:06 MG
Iron, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Lead, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Manganese, TCLP	0.13	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Mercury, TCLP	ND	mg/l	0.0010	1 7470A	0216	18:25 0217 10:15 DM
Molybdenum, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Nickel, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Selenium, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG
Silver, TCLP	ND	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Thallium, TCLP	ND	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Vanadium, TCLP	ND	mg/l	0.10	1 6010B	0216	18:30 0217 11:06 MG
Zinc, TCLP	ND	mg/l	0.50	1 6010B	0216	18:30 0217 11:06 MG

Comments: Complete list of References and Glossary of Terms found in Addendum I

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH DUPLICATE ANALYSIS**

Laboratory Job Number: L0501427

Parameter	Value 1	Value 2	Units	RPD	RPD Limits
pH for sample(s) 01 (L0501427-01, WG193983-2)					
pH	6.3	6.3	SU	0	
TCLP Metals for sample(s) 01 (L0501427-01, WG194357-1)					
Aluminum, TCLP	2.5	2.5	mg/l	0	
Arsenic, TCLP	ND	ND	mg/l	NC	
Barium, TCLP	ND	ND	mg/l	NC	
Beryllium, TCLP	ND	ND	mg/l	NC	
Cadmium, TCLP	ND	ND	mg/l	NC	
Chromium, TCLP	ND	ND	mg/l	NC	
Copper, TCLP	ND	ND	mg/l	NC	
Iron, TCLP	ND	ND	mg/l	NC	
Lead, TCLP	ND	ND	mg/l	NC	
Manganese, TCLP	0.13	0.12	mg/l	8	
Molybdenum, TCLP	ND	ND	mg/l	NC	
Nickel, TCLP	ND	ND	mg/l	NC	
Selenium, TCLP	ND	ND	mg/l	NC	
Silver, TCLP	ND	ND	mg/l	NC	
Thallium, TCLP	ND	ND	mg/l	NC	
Vanadium, TCLP	ND	ND	mg/l	NC	
Zinc, TCLP	ND	ND	mg/l	NC	
TCLP Metals for sample(s) 01 (L0501427-01, WG194344-3)					
Mercury, TCLP	ND	ND	mg/l	NC	

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH SPIKE ANALYSES**

Laboratory Job Number: L0501427

Parameter	% Recovery	QC Criteria
pH LCS for sample(s) 01 (WG193983-1)		
pH	100	
TCLP Metals LCS for sample(s) 01 (WG194357-4)		
Aluminum, TCLP	109	
Arsenic, TCLP	100	
Barium, TCLP	98	
Beryllium, TCLP	96	
Cadmium, TCLP	95	
Chromium, TCLP	95	
Copper, TCLP	103	
Iron, TCLP	94	
Lead, TCLP	101	
Manganese, TCLP	95	
Molybdenum, TCLP	93	
Nickel, TCLP	94	
Selenium, TCLP	104	
Silver, TCLP	100	
Thallium, TCLP	92	
Vanadium, TCLP	98	
Zinc, TCLP	98	
TCLP Metals LCS for sample(s) 01 (WG194344-1)		
Mercury, TCLP	102	
TCLP Metals SPIKE for sample(s) 01 (L0501427-01, WG194357-2)		
Aluminum, TCLP	105	
Arsenic, TCLP	98	
Barium, TCLP	94	
Beryllium, TCLP	91	
Cadmium, TCLP	94	
Chromium, TCLP	90	
Copper, TCLP	98	
Iron, TCLP	89	
Lead, TCLP	96	
Manganese, TCLP	90	
Molybdenum, TCLP	90	
Nickel, TCLP	89	
Selenium, TCLP	99	
Silver, TCLP	95	
Thallium, TCLP	88	
Vanadium, TCLP	98	
Zinc, TCLP	98	
TCLP Metals SPIKE for sample(s) 01 (L0501427-01, WG194344-2)		
Mercury, TCLP	118	

**ALPHA ANALYTICAL LABORATORIES**  
**QUALITY ASSURANCE BATCH BLANK ANALYSIS**

Laboratory Job Number: L0501427

PARAMETER	RESULT	UNITS	RDL	REF METHOD	DATE PREP	ID ANAL
Blank Analysis for sample(s) 01 (WG194357-3)						
TCLP Metals						
TCLP Extraction				1 1311	0216 16:45	
Aluminum, TCLP	ND	mg/l	1.0	1 6010B	0216 18:30 0217 10:59 MG	
Arsenic, TCLP	ND	mg/l	1.0	1 6010B	0216 18:30 0217 10:59 MG	
Barium, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Beryllium, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Cadmium, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Chromium, TCLP	ND	mg/l	0.20	1 6010B	0216 18:30 0217 10:59 MG	
Copper, TCLP	ND	mg/l	0.20	1 6010B	0216 18:30 0217 10:59 MG	
Iron, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Lead, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Manganese, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Molybdenum, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Nickel, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Selenium, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Silver, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Thallium, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Vanadium, TCLP	ND	mg/l	0.10	1 6010B	0216 18:30 0217 10:59 MG	
Zinc, TCLP	ND	mg/l	0.50	1 6010B	0216 18:30 0217 10:59 MG	
Blank Analysis for sample(s) 01 (WG194344-4)						
TCLP Metals						
TCLP Extraction				1 1311	0216 16:45	
Mercury, TCLP	ND	mg/l	0.0010	1 7470A	0216 18:25 0217 10:11 DM	

**ALPHA ANALYTICAL LABORATORIES  
ADDENDUM I**

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**REFERENCES**

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

**GLOSSARY OF TERMS AND SYMBOLS**

REF	Reference number in which test method may be found.
METHOD	Method number by which analysis was performed.
ID	Initials of the analyst.
ND	Not detected in comparison to the reported detection limit.
NI	Not Ignitable.
ug/cart	Micrograms per Cartridge.

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